Test Specifications Fuel Injection Pumps (A) and Governors

VDT-WPP 001/4 KHD 1 c

3. Edition

| | W. | | | | | | En | | |
|--------|---------|------|-------|----|------------|-----|-----------------------------------|------------|------------|
| PES 2 | A 80 | C/D | 310/3 | RS | 1322 EP/F | RSV | 425-1500 A8B/C501D,704D | supersedes | |
| | 75/80 | | | | | | 325-1400 A8B/C272D,495D,540D,742D | company | KHD |
| | | -, - | | | 1185 | | 2011D,578D,1022D | engine | F L 912 |
| | | | | RS | 1320 | | 325-1250A8B/C2085L | | BF 6 L 912 |
| | A 75/80 | | | | | | 325-1150A8B/C275D,298D,491D,492D, | .493D | FL 912 W |
| PES 4 | 75/80 | C/D | 410/3 | | | | (1075)494D,540D,578D,601D,604D |) | |
| | | C/D | | | 1255 | | 657D,705D,715D,694D | | |
| PES 4 | | | 410/3 | | | | 375-1150A8B/C590D | | |
| PES 4 | | | | | 2346(2523) | | 325-1050A8B/C532D,577D | | |
| PES 5 | 4 80 | C\B | 410/3 | | | | 325-1000A8B/C588D,598D,1032D,733D |) | |
| | | | | | 2347(2526) | | 375-1000A8B/C606D, | | |
| PES 5 | | | 410/3 | | | | 325- 900A7B/C494D,602D,634D,2011D |) | |
| PES 6 | | | 410/3 | | | | 325- 750A7B/C633D, | | |
| PES 6 | | | 410/3 | | | RS | 275/1400A0B/C496D, | | |
| PES 6F | 80/85 | C/D | 410/3 | | | | 325/1400A0B/C620D, | | |
| | | | | | 2348 | | 325/1650A0B/C2087L, | | |
| | | | | RS | | | 275-1400AB 757D,799D | | |
| | | | | | | RQ | 275/1400AB 694 D ,798D | | |

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke 1,9 + 0,1

mm (from BDC)

For all plunger-and-barrel assembly diameters!

| Rotational speed rev/min 1 | Control rod travel mm 2 | Fuel delivery "C" 7,5 cm3/100 strokes 3 | Difference cm³/ 100 strokes 4 | Control rod travel mm 2 | Fuel delivery "D" 7,5 cm³/100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|-------------------------------------|-------------------------------|---|--|----------------------------------|---|--|
| 1000 | 12 | 6,2-6,6 | 0,4 | 12 | 5,2-5,6 | |
| 200 | 9 15 9 | 3,0-3,7 8,5-9,5 1,9-2,8 | | 9 - 9 | 2,7-3,5 - 0,7-1,4 | ŝ |

Adjust the fuel delivery from each outlet according to the values in

| Rotational speed rev/min 1 | Control rod travel mm 2 | Fuel delivery "C" 8 cm³/100 strokes | Difference cm³/ 100 strokes | Control rod travel mm 2 | Fuel delivery "D" 8 cm³/100 strokes 3 | Spring pre-tensioning (forque-control valve) mm 6 |
|-------------------------------------|-------------------------------|-------------------------------------|-----------------------------------|----------------------------------|---------------------------------------|--|
| 1000 | 9 | 4,1-4,5 | 0,4 | 9 | 3,1-3,5 | |
| 200 | 6 15 9 | 1,2-2,0 10,3-11,4 2,9-3,7 | | 6 - 9 | 0,1-0,6 - 0,6-1,3 | |

Adjust the fuel delivery from each outlet according to the values in

| Rotational speed rev/min 1 | Control rod travel mm 2 | Fuel delivery "C" 8,5 cm3/100 strokes 3 | Difference cm³/ 100 strokes 4 | Control rod travel mm 2 | Fuel delivery "D" 8,5 cm3/100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|----------------------------|-------------------------|---|--|----------------------------------|---|--|
| 1000 | 9 | 5,0-5,5 | 0,4 | 9 | 4,1-4,5 | |
| 200 | 6 15 6 | 1,3-2,1 12,1-13,2 0,1-0,9 | | 6 - 9 | 0,6-1,4 | |

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Adjust the fuel delivery from each outlet according to the values in

10.81

2-cy1.:

$$3-cy1$$
: $\begin{cases} 1-3-2 \\ 0-120-240 \end{cases}$

B. Governor Settings - page 3 - 13, Instructions page 11

C. Settings for Fuel Injection Pump with Fitted Governor

| Upper rated s | peed | | Intermediat | e rated sp | t | Lower rated | speed | Control rod | | eeve travel |
|---------------------------------------|--|---------------------------------------|---------------------------------|------------|-------------------------|-----------------------|---------------------|---------------------------------|---------------|--------------------|
| Degree of deflection of control | | Control rod travel | Degree of deflection of control | | Control rod travel | deflection of control | | travel | | 1 |
| ever | rev/min 2 | mm 3 | lever 4 | rev/min | mm 6 | lever 7 | ev/min | mm 9 | rev/min 10 | mm 11 |
| 425 - 1 | 1500 A | 5 B 501 D | L. 704 D | L | | | | | | |
| loose | | 0,3-1,0 | | | | ca.26 | 425 | 5,5 | 1500 | 9,5-9,6 |
| | X | 3,75 | | | | | | min. 19 | | 9,9-10, 10,5-10 |
| ca. 68 | 1575- | 1550 = 8,5 1605 = 4,0 = 0,3-1,7 | | | | | 425 610-6 | 5,9-6,1 70 = 2,0 | | |
| 325 - | 1400 / | A 8 B 495 C | OL, 272 | | | | | | | |
| loose | 800 | | | | | ca.20 | 325 | 5,0 | | 10,2-10 10,9-11 |
| ca. 67 | 1440- | = 4,5 -1450 = 9,2 | 2 | | | | 100 325 500-5 | min. 19 5,4-5,6 60 = 2,0 | | 11,5-11 |
| | | -1500 = 4,0 = 0,3-1,7 |) | | | | | | | |
| 325 - | 1400 | A 8 B 540 I |)1, 578 | DL, 10 | 22 DL | | | | | |
| ca. 66 | | 12,0 | | | aliary | ca. 20 | 325 | 5,0 | 1380 1000 | 0,4-0,6 |
| | 1430 1460 | 8,5 4,8 | sprin | | (III) | | 200 325 | 19-21 5,4-5,6 | 600 | 1,2-1,4 |
| | 1420 1500 1580 | 2,0-3,4 | with sprin | | idry | | 450 660 | 2,7-4,1 | 5 | |
| 325 - | 1400 | A 8 B 2011 | DL | | | | | | 1 | |
| loose | 800 | 0,3-1,0 | | | | ca. 20 | 325 | 5,0 | 750 | 10,8-1 11,7-1 |
| ca. 64 | 1440 | 1450 = 9, | 8 | | | | 100 325 500- | min. 19 5,6-5,7 560 = 2,0 | 500 | 11,8-1 |
| | 1475 | 1505 = 4, = 0,3-1,7 | 0 | | | | 700 | 0 - 1 | | |
| | | <u> </u> | | 1 T | | | т— Т | | <u> </u> | |
| | | F | | | | | | | | |
| | | | esto | 1-15 | 0 41 | 13 | | | | |
| | | | | | | | | | | |

A3

| Degrae of | speed | Control rod | Intermediate Degree of | e rated sp | eea Control rod | Lower rated Degree of | speed | Control rod | Sliding | sleeve travel control trave |
|--------------------------|------------|--|------------------------|----------------|----------------------|--|----------------|--------------------------------|-------------|--------------------------------|
| teflaction of control | | travel | deflection of control | | travel | deflection of control | | travel | | 1 |
| ever i | rev/min | mm 3 | lever 4 | rev/min | mm 6 | lever 7 | rev/min | mm 9 | rev/min | mm 11 |
| 425 - | 1500 A | 5 B 501 DI | with p | ump 12 | 255 | | · | | | - |
| 1oose | | 0,3 - 1,0 | | <u> </u> | | ca. 23 | 425 | 5,5 | 1500 | 10 5 1 |
| | l . | = 3,75 | | | | ca. 23 | 100 | | 1020 | 10,5-1 10,9-1 11,5-1 |
| ca. 66 | 1590- | 1550 = 9,5 1620 = 4,0 = 0,3 - 1,7 | | | | | 425 | 5,9-6,1 570 = 2,0 0 - 1 | 300 | 17,551 |
| 325 - 1 | 250 A | 8 B 2085 L | | | | | | | | |
| loose | 800 X | 0,3 - 1,0 4,0 | | | | ca. 18 | 325 | 7,8 | | |
| ca. 56 | 1315- | 1300 = 10, 1345 = 4,0 = 0,3 - 1,7 | | 13 | | | 325 | min. 19 8,2-8,4 90 = 2,0 | | |
| 205 | | | | 0.41 | | | | | | |
| 100se | | 8 B 705 DL 0,3 - 1,0 | | 12 | | 21 | 225 | | 4450 | |
| 10030 | | = 4,75 | | Ō | | ca. 21 | 325 | 5,0 min. 19 | 900 | 10,6-10 11,0-11 |
| ca. 54 | 1220- | 1200 = 9,6 1250 = 4,0 = 0,1-1,7 | | Testoil | | | 325 | 5,4-5,6 50 = 2,0 | 500 | 11,6-11 |
| 325 - 1 | 150 A | 8 B 705 DL | with pu | mp 13(| 00 | | | | | |
| oose | 800 X | 0,3 - 1,0 6,25 | | | | ca. 17 | 325 | 7,8 | 1150 | 11,0-11 |
| a. 52 | 1235 | 1200 = 10,0 1265 = 4,0 = 0,3 - 1,7 | - | | | | 325 460-5 | 8,2-8,4 500 = 2,0 | 500 | 11,4-11 11,6-11 |
| | | | | | | | | | | |
| | 50 A 8 | 3 B 715 | Т | Ţ | · | | | | 1 | 1 |
| loose | 800 X = | 0,3 - 1,0 = 4,0 | | | | ca. 17 | 325 | | 1150 950 | 9,0-9,1 9,5-9,8 |
| ca. 52 | | 1200 = 8,0 $1235 = 4,0$ | | | | | 325 8 445-5 | 3,3-8,5 505 = 2,0 | 775 | 10,5-10 11,0-11 |

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| Upper rated s | peed | | Intermediate | rated sp | eed | Lower rated | speed | | Slidina si | eeve travel |
|---------------------------------|---------|-----------------------|---------------------------------|----------|-----|---------------------------------|---------|-----------------------|------------|---------------|
| Degree of deflection of control | | Control rod travel | Degree of deflection of control | | | Degree of deflection of control | | Control rod travel | | ontrol travel |
| lever | rev/min | mm | lever | rev/min | mm | lever | rev/min | mm | rev/min | mm |
| 1 | 2 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

325 - 1150 A 8 B 694 D

| ca. | 54 | 1150 1190 | 12,0 | without | 20031 | iary spri | ca. | 21 | 325 | 5,0 | 1150 | 0 |
|-----|----|--------------|------------------------|---------|--------|-----------|-----|----|-----|--------------------|------|---------|
| | | 1210 | 7,8 5,0 | Wichout | auxii | lary spri | 19 | | | 19 - 21 5,4-5,6 | 450 | 0,9-1,1 |
| | | 1200 | 8,0 - 9,6 5,0 - 7,5 | with au | xiliar | y spring | | | | 1,6-3,5 0 - 1 | | |
| | | 1210 | 0,3 - 1,0 | | | | | ; | : | | | |

325 - 1150 A 8 B 492 DL, 493 DL, 494 DL, 657 DL

| ca. | 54 | 1150 1180 1200 | 12,0 9,0 6,4 | without | auxil | iary spri | ca. ng | 21 | 5,0 19-21 5,4-5,6 | 0 0,4-0,6 0,9-1,1 |
|-----|----|----------------------|-----------------------------|---------|-------|-----------|-----------|----|-------------------------|-------------------------|
| | | 1280 | 8,0-9,5 3,4-5,0 0,3-1 | with au | xilia | ry spring | | | 1,6-3,4 0 - 1 | |

325 - 1150 A 8 B 494 DL with pump 1326

| loose | 800 X | 0,3 - 1,0 4,0 | | | ca. 18 | ļ | | 1130 930 | 10,5 11,0-11 | ,2 |
|--------|----------|---------------------------------------|--|---|--------|-----|--------------------------------|-------------|-----------------|----|
| ca. 52 | 1200- | 1180 = 9,5 1230 = 4,0 = 0,3-1,7 | | | | 325 | min. 19 5,4-5,6 45 = 2,0 | 500 | 11,5 | |
| | , 5, 5 | ., | | : | | | | | | |

325 - 1150 A 8 B 494 DL with pump 1324

| loose | 800 | 0,3 - 1,0 | | ca. 21 | 325 | 5,0 | i | 10,6-10. | |
|-------|-------|---|--|--------|--------------|--|-----|----------------------|--|
| | 1220- | 1200 = 9,6 1250 = 4,0 = 0,3 - 1,7 | | | 325 390-4 | min. 19 5,4-5,6 150 = 2,0 0 - 1 | 500 | 11,0-11, 11,6-11, | |

325 - 1150 A 8 B 494 DL with pump 1300

| 223 - | 1120 6 | וט דכד ט טו | . With p | ump 13 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | | - |
|--------|--------|---------------------------|----------|--------|---|----------|----|------|-----------|------|---------|---|
| loose | 800 | 0,3-1,0 | | | | ca. | 22 | 325 | 5,0 | 1150 | 10,5-10 | 6 |
| | X | 5,5 | | | | | | 100 | min. 19 | 915 | 10,9-11 | 1 |
| ca. 57 | | 1200 = 9,5 | | | | <u>.</u> | | 325 | 5,4-5,6 | | 11,4-11 | 5 |
| | | 1260 = 4,0 = 0,3 - 1,7 | | | | | | 395- | 455 = 2,0 | | | |
| | 1400 | -0,7 - 1,7 | | | | | | | | | | |
| | ļ | | | | | | | | | | | ļ |

| pper rated s | peed | | Intermediat | e rated sp | | Lower | | speed | 1 | | eeve travel |
|-------------------|---------|-----------------------------------|---------------------------------|--------------|-----------------------|--------------------------------|-----|----------|--------------------------------|---------------|-----------------------|
| legree of | | Control rod travel | Degree of deflection of control | | Control rod travel | Degree deflects of contr | on | | Control rod travel | Torque-c | ontrol travei |
| f control ever | rev/min | mm | lever | rev/min 5 | mm 6 | lever 7 | | rev/min | mm 9 | rev/min 10 | mm 11 |
| 325-11 | 50 A | 13 8 B 657 DL | I | <u> </u> | 1 | | ··· | <u> </u> | L . | L <u></u> | <u> </u> |
| loose | 800 | 0,3 - 1,0 | | | | ca. | 17 | 325 | 5,0 | 1150 | 10,6-10 |
| | Х | 4,25 | | | | | | 100 | min. 19 | 930 | 11,0-11 |
| ca. 52 | 1210 | 1190=9,6 1240=4,0 = 0,3-1,7 | | | | | | 325 | 5,4 - 5,5 45 = 2,0 0 - 1 | 500 | 11,6-11 |
| 325-11 | 50 A | 8 B 491 DL | <u> </u> | <u> </u> | <u> </u> | <u> </u> | : | | | L | [] |
| ca. 53 | 1150 | 10,0 | | Ţ | | ca. | 21 | 325 | 5,5 | 1150 | 0 |
| | 1180 | 7,0 | withou | | iary | | | 200 | 19 - 21 | | |
| | 1200 | 5,0 | spring | 1 | | | | 325 | 5,2-5,8 | 800 | 0,2-0,4 |
| | 1160 | 8,5-9,5 | | | | | | 400 | 1,6-3,4 | 500 | 0,6-0,8 |
| | 1200 | 4,2-5,8 | with a | | ary |] | | 500 | 0 - 1 | | |
| | 1300 | 0,3-1.0 | spring | | J | <u> </u> | | | <u> </u> | <u> </u> | L |
| 325-11 | 50 A | 8 B 540 DL, | 578 DL | <u>,</u> | _ | , | | 1 | | | T |
| ca. 54 | ļ | | | | | ca. | 21 | 325 | 5,0 | 1130 | 0 |
| | 1180 | 1 | withou | ut aux | ill iary spi | ina | | 200 | 19 - 21 | ann | 0,5-0,7 |
| | 1210 | | 10.10 | | il lary sp. | 9 | | 325 | 5,4-5,6 | ł | |
| | 1200 | 8,5-9,5 4,2-5,8 | | duvili | ary spring | 1 | | 500 | 1,4-3,4 | 500 | 1,0-1,2 |
| | 1300 | 1 | With | aux | dry Spr III: | | | 660 | 0 - 1 | | |
| 325-11 | .50 A | 8 B 601 DL | | | | | | | | | |
| ca. 56 | 1150 | 16,0 | | | | ca. | 21 | 325 | 5,5 | 1130 | 0 |
| | 1200 | 1 | witho | ut aux | iliary spi | ng | | 200 | 1 | 1130 | |
| | 1250 | | | | | | | 325 | 5,2-5,8 | 900 | 0,2-0,4 |
| | | 7,7-12,4 | | | | | | 400 | 1,4-3,3 | 500 | 0 ,6- 0,8 |
| | | 3,0-6,4 | with | aµxili | ary spring | | | 500 | 0 -1,5 | | |
| | 1 36 | 0 0,3- 1,0 | | | | | | | | | |
| 325-11 | 50 A | 8 B 298 DL | | | | | | | | | |
| loose | 800 | 0,3 - 1, | | | | ca. | 21 | 325 | 5,0 | 1150 | 10,5-10 |
| 10026 | 1 | = 4,75 | 1 | | | | | 100 | | 7 | 1 |
| | 1 | 4 | → | 1 | 1 | | | ł | 1 | 1 | i . |
| ca 50 | 1190 | 1200 = 9 9 | ; { | 1 | Į. | 1 | | 325 | 15.4-5.6 | 500 | 11,2-11 |
| ca. 59 | | 1-1200 = 9,5 1-1255 = 4,0 | J | | | | | 325 | 5,4-5,6 - 560 = 3 | 1 | 11,2-11 |

A6

| Upper rated s | peed | | intermediate | e rated spe | eed | Lower rate | d speed | | Sliding | leeve travel |
|---------------------------------|--------------|-----------------------|---------------------------------|-------------|-----------------------|---------------------------------|----------|-----------------------|-------------|----------------|
| Degree of deflection of control | | Control rod travel | Degree of deflection of control | | Control rod travel | Degree of deflection of control | | Control rod travel | Torque-C | control travel |
| e ve r 1 | rev/min 2 | mm 3 | lever 4 | rev/min | mm 6 | lever 7 | rev/min | mm 9 | rev/min | mm 11 |
| 325-11 | 50 A 8 | 3 B 275 DL | | | | | | | | |
| loose | 800 | 0,3-1,0 | | | | ca. 20 | 325 | 5,0 | 1150 | 10,6-10 |
| | x : | 4,0 | Ĺ | } | | | 100 | min. 19 | 800 | 11,2-11 |
| ca. 55 | 1190 | 1200=9,6 | | | İ | | 325 | 5,4-5,6 | 600 | 11,9-12 |
| | 1220 | 1250=4,0 | | | | | 425 | - 485 = 2 | ,0 | |
| | 1350 | 0,3-1,7 | | | | | | | | |
| 325-11 | 50 A 8 | B & 604 DL | L | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | l | 1 |
| ca. 56 | 1150 | 16,0 | | | | ca. 21 | 325 | 5,0 | 1130 | 0 |
| | 1180 | 13,4 | withou | t auxi | liary spr | ng | 200 | 19 - 21 | 800 | 0,5-0,7 |
| | 1250 | 5,6 | | | | | 325 | 5,4 - 5,6 | 5 00 | 0,6-0,8 |
| | 1220 | 7,5-10,2 | | | | ļ | 400 | 1,5 - 3,2 | | |
| | 1280 | 1,6-4,4 | with a | uxilia | ry spring | | 500 | 0 - 1 | 500 | 0,6-0,8 |
| | 1360 | 0,3-1,5 | | | | | | | | |
| 375-11 | 50 A 8 | 3 B 590 DL | | | | | | | | |
| ca. 53 | 1150 | 10,0 | | | | ca. 20 | 375 | 5,0 | 1130 | 0 |
| | 1170 | 7,8 | withou | t auxi | liary spr | ing | 250 | 19 - 21 | | |
| | 1000 | ٠ , | | | ì | i | 275 | - 4 | | 0 4 0 6 |

| ca. 5 | 3 1150 | 10,0 | | | | ca. | 20 | 375 | 5,0 | 1130 | 0 |
|-------|--------|---------|--------|--------|-----------|-----|----|-----|---------|----------|---------|
| Ì | 1170 | 7,8 | withou | t auxi | liary spr | ing | | 250 | 19 - 21 | | |
| | 1200 | 4,5 | | | | | | 375 | 5,4-5,6 | 800 | 0,4-0,6 |
| | 1170 | 7,5-8,6 | | | | | ļ | 430 | 2,0-3,8 | 500 | 0,9-1,1 |
| | 1230 | 1,5-3,4 | with a | uxilia | ry spring | | İ | 520 | 0 - 1 | | |
| | 1300 | 0,3-1,0 | | | | | | | | <u> </u> | |

325-1075 A 8 B 492 UL, 657 DL

| loose | 800 | 0,3-1,(| | ca. | 21 | 325 | 5,0 | 1075 | 1,0-11, |
|--------|-------|-----------|--|-------|----|------|---------|------|----------|
| | X : | 4,5 | | | | 100 | min. 19 | 900 | 11,4-11, |
| ca. 52 | 1115- | 1125=10,0 | | ! | | 325 | 5,4-5,6 | 500 | 2,0-12, |
| | 1160- | 1190= 4,0 | | | | 380- | 440=2,0 | | |
| | 1300- | 0,3 - 1,7 | | | | | | | |
| į | | | | | | | | | |

325-1050 A 8 B 532 DL

| ca. 49 | 1050 | 10,0 | | | | ca. | 21 | 325 | 5,0 | 1030 | 0 |
|--------|------|---------|-------|--------|--------|-----|----|-----|---------|------|---------|
| | 1080 | 6,8 | | | iliary | | | 200 | 19 - 21 | 800 | 0 |
| | 1100 | 4,5 | sprin | 9 | | | | 325 | 5,4-5,6 | 700 | 0,2-0,4 |
| | 1060 | 8,5-9,5 | ſ | | | | ļ | 400 | 1,6-3,4 | 500 | 0,6-0,8 |
| | 1120 | 2,5-4,1 | with | auxıli | ary | | | 500 | 0 - 1 | | |
| | 1200 | 0,3-1,0 | sprin | 9 | | | | | | | |

| Upper rated | speed | | Intermediate | rated sp | eed | Lower rated | speed | | Sinding | eeve travel |
|--|---------------|---|-----------------------|--------------|-----------------------|---------------------------------|---------|-----------------------|----------|--------------|
| Degree of deflection of control lever | ection travel | | deflection of control | | Control rod travel | Degree of deflection of control | | Control rod travel | Torque-c | ontrol trave |
| 1 | 2 | 3 | lever 4 | rev/min 5 | 6 | lever 7 | rev/min | mm 9 | rev/min | mm 11 |

| ca. 51 | 1050 | 16,0 | - | | | ca. | 21 | 325 | 5,0 | 1030 | 0 |
|--------|------|-----------|---------|-------|-----------|-----|----|-----|---------|------|--------|
| | 1100 | 11,0 | without | auxi | iary spri | ng | | 200 | 19 - 21 | 800 | 0 |
| | 1150 | 5,0 | | | | | | 325 | 5,4-5,6 | 700 | ,1-0,2 |
| | 1070 | 14,0-14,8 | | | | | | 400 | 1,6-3,4 | 500 | ,6-0,8 |
| | 1130 | 6,0-9,4 | with a | xilia | ry spring | | | 500 | 0 - 1 | | |
| | 1250 | 0,3-1,0 | | | | | | | | | |

325-1000 A 8 B 588 DL

| | x 1020- 1060- | 0,3-1,0 = 4,25 1030= 9,8 1090= 4,0 0,3-1,7 | | | | ca. 16 | 100 325 | 5,0 min. 19 5,4-5,6 40= 2,0 | 800 | 10,8-10 11,1-11 11,8-11 | 4 |
|--|---------------------|--|--|--|--|--------|------------|--------------------------------------|-----|-------------------------------|---|
|--|---------------------|--|--|--|--|--------|------------|--------------------------------------|-----|-------------------------------|---|

325-1000 A 8 B 598 DL

| ca. 48 | 1000 | 16,0 | | | | ca. | 19 | 325 | 5,5 | | |
|---------|------|----------|---------|-------|-----------|-----|----|-----|---------|-----|---------|
| | 1050 | 11,1 | withou: | auxi | liary spr | ng | | 200 | 19 - 21 | 980 | 0 |
| | 1100 | 5,0 | | | | i | İ | 325 | 5,2-5,8 | 800 | 0,3-0,5 |
| ļ | ! | 9,0-11,0 | | | | | | 40C | 1,2-4,0 | 450 | 0,9-1,1 |
| ļ | 1 | 2,2-4,6 | with a | ווואנ | ry spring | | | 480 | 0 - 1 | ! | |
| <u></u> | 1220 | 0,3-1,5 | | | | | | | | | |

375-1000 A 8 B 606 DL

| loose | 800 | 0,3-1,0 | | ca. 20 | 375 | 5,0 | 1000 | 11,2-11 |] 3 |
|-------|-----|------------------------|--|--------|------|-----------|------|---------|-----|
| 17 | X | = 4,25 | | | 100 | min. 19 | 1 | 11,7-12 | ľ |
| 1 | | 1050=10,2 1105= 4,0 | | | | 5,4-5,6 | • | 12,2-12 | 3 |
| | | 0,3-1,7 | | | 420- | 480 = 2,0 | | | |
| 8 | | | | | | | | | |

325-1000 A 8 B 733 DL

| loose | 800 | 0,3-1,0 | | ca. | 19 | 325 | 5,0 | 1000 | 0 |
|--------|-------|----------------------|--|-----|----|------|--------------------|------|-------|
| ca. 48 | | = 4,25 1080= 9,2 | | | | 100 | min. 19 | | 0,2-0 |
| | | 1130= 4,0 0,3-1,7 | | | İ | 380- | 5,4-5,6 430=2,0 | 500 | 1,0-1 |
| | 1100- | 0,5-1,7 | | | | 520 | 0 - 1 | | |

| Upper rated | speed | | Intermediat | e rated sp | eed | Lower rated | speed | • | Sliding sleeve trav | | |
|---------------------------------------|---------|-----------------------|---------------------------------------|-------------------|-----|--|---------|-----------------------|----------------------|----|--|
| Degree of deflection of control lever | rev/min | Control rod travel | Degree of deflection of control lever | deflection travel | | Degree of deflection of control lever | rev/min | Control rod travel | Torque-control trave | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |

325-1000 A 8 B 1032 DL

| 1 | | | | | | | _ [| | 1 | | £ . | • |
|---|-------|------|-----------|--|----------|-----|-----|----------|----------|------|----------|---|
| | loose | 800 | 0,3-1,0 | | | ca. | 19 | 325 | 5,0 | 1000 | 10,8-10 | 9 |
| | | x | = 4,25 | | | | | 100 | min. 19 | 750 | 11,1-11 | 4 |
| | ca. 4 | 1040 | -1050=9,8 | | | | | 325 | 5,4-5,6 | 500 | 11,5-11 | 6 |
| | | 1075 | -1105=4,0 | | | | | 480- | 580=2,0 | | | |
| | | 1200 | 0,3-1,7 | | | | | | | | | |
| | | | | | <u> </u> | | | <u> </u> | <u> </u> | | <u> </u> |] |

325-900 A 7 B 494 DL

| | ca. 59 | 900 | 16,0 | | | | ca. 26 | 325 | 5,5 | - | - |
|---|--------|--------|----------|----------|----------|-----------|--------|-------------|---------|----------|----------|
| | | 950 | 10,0 | withou | t auxi | liary spr | ing | 10 0 | 19 - 21 | | |
| | | . 1000 | 2,4 | | | | | 325 | 5,2-5,8 | | <u> </u> |
| | | 900 | ca. 11,0 | | | | | 360 | 2,6-4,0 | | |
| | | 960 | 7,0-9,6 | with a | uxilia | ry spring |] | 450 | 0 - 1,5 | | |
| L | | 1050 | 0.3-1.5 | <u> </u> | <u> </u> | | | İ | L | <u> </u> | |

325-900 A 7 B 602 DL

| loose | | 0,3-1,0 = 5,5 | | ca. 26 | 325 100 | 5,0 min. 19 | |
|--------|-----|-----------------------|--|--------|------------|----------------|--|
| ca. 58 | 920 | -930=9,2 | | | 325 | 5,4-5,6 | |
| | | -975=4,0 = 0,3-1,7 | | | 360- | 120=2,0 | |
| | | | | | | | |

325-900 A 7 B 634 DL

| ca. 57 900 920 | 8,4 | without a | ıux | liary spr | ca. 26 ing | | 5,0 min. 19 5,4-5,6 | |
|---------------------------|--------------------|-----------|------|-----------|---------------|------------|---------------------------|--|
| 940 920 950 1020 | 8,0-9,5 2,0-4,0 | with aux | ilia | ry spring | | 360 450 | 3,0-4,3 0 -1,5 | |

325-900 A 7 B 2011 D

| loose | 800 | 0,3-1,0 | | ca. 20 | 325 | 5,5 | 900 | 0 |
|--------|------|-----------|--|--------|------|-----------|-----|---------|
| | х | = 5,5 | | | 100 | min. 19 | 600 | 0,6-0,8 |
| ca. 60 | 940 | -950=10,6 | | | 325 | 6,0-6,1 | 400 | 0,9-1,1 |
| | 965 | -995= 4,0 | | | 430- | 500 = 2,0 | | |
| | 1100 | = 0,3-1,7 | | - | 600 | 0 - 1 | | |
| | | | | | | | | L |

| Upper rated s | beed | | Intermediate | rated spe | ed | Lower rated | speed | | Sliding sl | eeve travel |
|----------------------|---------|-------------|----------------------|-----------|-----------------------|----------------------|---------|-----------------------|-------------|---------------|
| Degree of deflection | | Control rod | Degree of deflection | | Control rod travel | Degree of deflection | 1 | Control rod travel | | ontrol travel |
| of control | rev/min | mm | of control lever | rev/min | mm | of control lever | rev/min | mm | rev/min | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 325 -7 5 | O A 7 | B 633 DL | | | | | | | | |
| ca. 45 | 750 | 16,0 | | | | ca. 21 | 325 | 5,5 | 730 | 0 |
| | 775 | 11,4 | without | auxi | liary spr | ng | 180 | 19 - 21 | | |
| | 800 | 6,0 | | | | · | 325 | 5,2-5,8 | 400 | 0,5-0,7 |
| | 760 | 9,2-10,4 | | | | | 420 | 2,0-3,6 | | |
| | 850 | 1,5-3,3 | with a | xilia | ry spring | | 580 | 0 - 1 | | |
| | 920 | 0,3- 1 | | | | | | | | |
| EP/RS 2 | 275/14 | 00 A 0 B 49 | 06 DL | L | <u> </u> | <u> </u> | | <u> </u> | L | |
| VHca.72 | 1400 | 9,8 | | <u> </u> | * | VH max. | 285 | 5,9 | 1380 | 0 |
| | | 9,8-10,6 | | 1 | | | 150 | 20 - 21 | | |
| FH max. | 1 | 7,6-9,2 | | | * | FHca.40 | 285 | 5,6-6,2 | 900 | 0,4-0,6 |
| | | 4,6-6,4 | | | | | 400 | 3,2-4,7 | 400 | 0,8-1,0 |
| | | 2,0-3,8 | | | | | 600 | 0 - 1 | 400 | 0,0-1,0 |
| | | 0,3- 1 | | | | | | | | |
| ED /DS 3 | 225 /1/ | 00 A 0 B 62 |) NI | <u> </u> | <u> </u> | | | | | |
| VHca.73 | | 15,8-16,4 | T - | T _ | - * | VH max. | 325 | 8,3 | 1380 | 0 |
| | | 12,9-14,0 | | | | | 260 | 9,1-10,0 | 1250 | |
| FH max. | ŀ | 9,9-11,5 | | | * | FHca31 | 1 | 8,4-9,1 | l . | 0,8-1,0 |
| | 1 | 6,6-8,5 | | | | | 1 | 7,4-7,9 | } | 1,2-1,4 |
| | 1600 | | ļ | | | | 450 | 4,1-5,6 | | |
| | 1660 | | | | | | 800 | 3,5-4,0 3,5-4,0 | | |
| L | | 1 | <u> </u> | | | | 1500 | | <u> </u> | <u> </u> |
| EP/RS : | 325/16 | 50 A O B 20 | 087 L | | | | ··· | | | |
| VHca.49 | 800 | 0,3-1,0 | | | * | VH max. | 325 | 6,0 | | |
| FH max | | | | | * | FHca18 | 100 | min.10,8 | | |
| | 1690- | 700=8,9 | | | | | 450- | 490=2,0 | | |
| | 1740- | 770=4,0 | | | | | 600 | 1,8 | | |
| | 1900 | 0,3-1,7 | | | | | 1 | | | |

| * | VHca.49 | 800 | 0,3-1,0 | | | * | VH max. | 325 | 6,0 | | |
|---|----------|----------|----------|---|---|---|-------------|----------|-------------|----------|-------|
| * | FH max | | | | | * | FHca18 | 100 | min.10,8 | | |
| | | 1690- | 700=8,9 | | | | | 450-4 | 90=2,0 | | |
| • | | 1740-1 | 770=4,0 | | | | | 600 | 1,8 | | |
| | | 1900 = | 0,3-1,7 | | | | | | | | Ì |
| | • | | | | | | | | | | |
| | <u> </u> | <u> </u> | <u> </u> | L | L | L | | <u> </u> | | <u> </u> | _ |

VH=Control lever
* FH=Accelerato lever

| 1 1 | | 1 | | | | | |
|-----|---|----------|------|---|---|-------|---|
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| 1 | 1 | 1 | | | | | |
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| 1 ! | 1 | 1 1 | | | | | |
| i i | 1 | | | | | | |
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| l | | <u> </u> | | L | L | L | L |

EP/RS 325/1400 AO B620DL is an idle maximum speed governor of a new kind. Compared with the EP/RSV governor it has the following characteristics:

a) The speed control lever is fixed with blocking screws.

b) The shutoff arm serves as driving lever (delivery lever).

c) A steel bolt pressed into the governor housing serves as the max. speed stop of the driving lever.

d) The lower idle speed is governed by a spring in the torque-control capsule.

e) There are no idle auxiliary spring or stop/idle-stop screw.

The testing and adjustment of the governor correspond partly to that of the EP/RSV..- governor (see Test Instructions VDT-WPP 001/4-1st. suppl.). Those work steps which are different are listed below.

Preliminary mechanical test see Test Instructions, section 1.

To 1.a): The stop screw must no longer be set.

To 1.b): When testing the full control-rod travel, the driving lever should be brought into the full load position.

Adjusting and testing

The clamping device 1 $688\ 040\ 122$ - EFEP $56\ C/4$ should be used for mounting the adjusting device 0 $681\ 440\ 006$ - EFEP $56\ C$.

1. Basic position of the governor spring and testing of the control-rod travel at upper rated speed see Test Instructions, step 1. Test specifications see section B, columns 1-3.

Fix the resulting final control-lever position with the stop screw.

Pull the drive lever with spring at max. speed stop if necessary.

Additional instructions: The difference in the control-rod travel between rising and falling speed must not exceed 1 mm..

When driving lever is in rated speed position press the stop button. The control rod must also reach stop position.

- Adjusting the full-load delivery: see Test Instructions, step 2.
 Drive lever in position full load.
 Test specifications see section C, columns 1-2.
- 3. Adjusting the torque control: see Test Instructions, steps 3 and 3a.

 Drive lever in position full load.

 Test specifications see section B, columns 10-11 and section C, columns 4-5.
- 4. Check the idle-speed control (replaces step 4 of the test instructions). Adjusting device EFEP 56.. should be removed from the control lever and adjust according to drive lever. (Please note: drive lever horizontal position = 40°). Test specifications see section B, columns 7-9.

Drive the pump at the speed shown in the frame and adjust the drive lever so that the relevant control-rod travel can be reached. In this way the drive lever position should correspond to the value given.

Clamp the drive lever firmly.

En

Check the control-rod travel lengths at the speeds prescribed. If necessary, change the spring retainer and repeat the test from 3. The difference between rising and falling speeds must not exceed 0.7 mm..

- 5. Step 5 of the Test Instructions is no longer required.
- 6. Adjusting the breakaway: see Test Instructions, step 6. Test specifications see section C, column 3.

When adjustment has successfully been completed, block the control lever with both stop screws.

| B. | Go | vernor | Settings |
|----|----|--------|-----------------|
|----|----|--------|-----------------|

| Checkini PRG che | | Full-load s | • | - | cifications (4) | idle spec Setting p | - | | cifications (5) | Torque d | (3) |
|---------------------|-----------------------------|-------------|-----------------------|-----------------------------|-----------------|------------------------|---|---------|-----------------|----------|-----------|
| | Control rod travel mm | rev/min | Control rod travel | Control red travel mm | rev/min | rev/min | ì | tea/wiu | | rev/min | travel |
| RQ | 275/1400 A | 3 B 694 | D, 79 | 8 D | 6 | / | 8 | 9 | 10 | | |
| 1300 | 13,7-14,3 | 1300 | 14,0 | 1420 | 13,6-14,0 | 640 | 0 | 100 | 6,2-8,1 | 650 | 15,8-16,0 |
| | | | | 1460 | 9,6-13,0 | | | 250 | 4,8-6,8 | 900 | 14,9-15,3 |
| | ! | | | 1530 | 0 - 9 | | | 350 | 3,0-5,2 | 1100 | 14,0-14,3 |
| | | | | 1620 | 0 | | | 540 | 0 | | |

Torque-control travel on flyweight assembly dimension a 0,65

Speed regulation At

1 mm less control rod travel

C. Settings for Fuel Injection Pump with Fitted Governor

| governor (| delivery on control lever mp 40°C (104°F) | Control rod stop | Fuel deliv | ery characteristics | 36) | Starting f | Control |
|------------|---|------------------|------------|-------------------------------------|-----|------------|------------------------------------|
| rev/min | cm ³ /-1000 strokes | rev/min | rev/min | cm ³ /~1000 strokes 5 | | rev/min | cm ³ /1000 strokes / mm |
| | | | | | | | |
| | | | | | | | |
| | | ! | | | | | |
| | | | | | | | |
| | | ! | | | | | |

Checking values in brackets

B. Governor Settings

| Full-load speed re Setting point Control rev/min d travel mm 3 4 | , | Control rod travel | tion Test specifications Control rod travel rev/min mm 9 10 | Control rod travel mm 11 |
|---|---|-----------------------|---|--------------------------|
| | | | | |

Torque-control travel

Speed regulation At

1 mm less control rod travel

C. Settings for Fuel Injection Pump with Fitted Governor

| | Full-load delivery on governor control tever Test oil temp 40°C (104°F) | | Control rod stop | Fuel deliv | Fuel delivery characteristics | | | uel aelivery ed 1 | G Contrar |
|-----------------------------|---|--------------------|------------------|------------|-------------------------------|-------|-------------|---|--------------|
| | | 1 - | rev/min | rev/min | 1_ | | ĺ | cm ³ /1000 strokes / 7 | nod trav |
| | | | | | | | | | |
| | | | | | | | ; | 1 | |
| | | | | | | | | <u>;</u> | |
| | | | | | | | ; ; ; | ! : : | |
| Checking values in brackets | Checking | values in brackets | <u> </u> | <u>i</u> | | _ ~~~ | | | |

| Upper rated speed | | | Intermediate rated speed | | | Lower rated | speed | Sliding sleeve travel | | |
|---------------------------------|---------|-----------------------|---------------------------------|----------|----|---------------------------------|-----------------------|-----------------------|-----------------------|----|
| Degree of deflection of control | | Control rod travel | Degree of deflection of control | travel d | | Degree of deflection of control | Control rod travel | | Torque-control travel | |
| lever | rev/min | mm | lever | rev/min | mm | lever | rev/min | mm | rev/min | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

| RQV 275 | -1400 | AB 757 D, | 799 D | | | | | | | |
|---------|------------------------------|---------------------------------------|-------|---|-----|-------------------|---------------------------------|---|------------------------------|-----------------------------------|
| ca. 68 | 1400 1480 1560 1660 | 15,0-18,2 7,8-13,0 0 - 7,2 0 | - | - | toi | rque-cor ca.12 | 240 350 500 700 890 | travel Ma 6,0-8,0 2,8-4,8 2,4-3,8 0,8-2,2 | 3 a = 1400 1100 600 | 0,9 mm 0 0,4-0,6 0,8-1,0 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |
| | | | | | | | | | | |

| | ull-load stop smp 40°C (104°F) | Rotational- speed irritat | 130 | nel delivery haracteristics | Output and speed | | |
|--------------------------------------|---|--|---------------------------------|---|--|--|--|
| rev/min | cm [®] r1000 atrokes | changed to) rev/min 3 | rev/min 4 | cm ² /1000 strokes | PS /U/min. | | |
| | F 2 L 912 - | PES 2 A 80 D | 310/3 | RS 1322 | (F- or B-power) | | |
| 1400 1250 1250 1250 1200 | 60,0-61,0 50,5-52,5 45,5-47,5 36,5-38,5 59,5-61,5 | 1440 1270 1270 1270 1270 1220 | 700 800 800 800 800 | 54,5-56,5 44,0-47,0 38,0-41,0 31,0-34,0 56,5-59,5 | 28 kW / n = 2800 23 kW / n = 2500 21 kW / n = 2500 18 kW / n = 2500 26 kW / n = 2400 | | |
| 1150 1075 1000 950 900 | 45,5-47,5 48,0-50,0 58,5-60,5 57,5-59,5 57,5-59,5 | 1170 1095 1020 970 920 | 800 800 800 800 | 38,5-47,5 44,0-47,0 57,5-60,5 56,5-59,5 | 20 kW / n = 2300 21 kW / n = 2150 23 kW / n = 2000 22 kW / n = 1900 21 kW / n = 1800 | | |
| 900 900 900 800 750 | 47,0-49,0 55,0-56,0 38,5-40,5 31,5-33,5 40,5-42,5 | 920 940 920 820 760 | 800 800 - - | 47,0-50,0 - 37,0-40,0 - - | 19 kW / n = 1800 18,5 kW / n = 1800 16,5 kW / n = 1800 13 kW / n = 1600 15,0 kW / n = 1500 | | |
| 750 750 | 60,5-62,5 35,5-37,5 | 760 760 above rated o | - - | - | 18,0 kW / n = 1500 14,0 kW / n = 1500 | | |
| 900 900 750 | 63,5-65,5 51,0-53,0 59,5-61,5 | 910 910 910 760 | - - - | - - - | A 20,0 (+10%) / n = 1800 A 18,0 (+10%) / n = 1800 A 16,5 (+10%) / n = 1500 | | |
| I5N-power | output (5% a | bove rated out | put) | | | | |
| 900 | 63,0-65,0 | 910 | - | - | A 21,0 (+ 5%) / n = 1800 | | |
| | | | | | Testoil-ISO 4113 | | |

En 345

| | | #Hoad stop emp 40°C (104°F) | Rotational- speed limitat Note | | Jet delivery Naracteristics | Output and speed |
|-------|--|---|--|---------------------------------|---|--|
| | rev/min | cm%1000 strokes 2 | changed to) rev/min 3 | rev/min 4 | cm ² 1000 strokes 5 | PS /U/min. |
| | F 3 L 912 | - PES 3A <u>80</u> | D 410/3 RS 118 | 3, 13 | 4 | (F- or B-power output) |
| | 1500 1500 1400 1400 1325 | 57,5-59,5 53,5-55,5 65,5-67,5 60,5-62,5 63,5-65,5 | 1520 1520 1420 1420 1340 | 800 800 800 800 800 | 41,5-44,5 37,5-40,5 51,5-54,5 48,5-51,5 50,5-53,5 | 38,3 kW (52 PS) / n = 3000 34,6 kW (47 PS) / n = 3000 42,7 kW (58 PS) / n = 2800 40,5 kW (55 PS) / n = 2800 41,2 kW (56 PS) / n = 2650 |
| | 1325 1300 1250 1250 | 59,0-61,0 55,5-57,5 62,0-64,0 59,5-61,5 | 1340 1320 1270 1270 | 800 800 800 800 | 47,5-50,5 43,5-46,5 51,5-54,5 51,5-54,5 | 39,0 kW (53 PS) / n = 2650 36,8 kW (50 PS) / n = 2600 39,7 kW (54 PS) / n = 2500 39,0 kW / n = 2500 |
| | 1250 1250 1250 1250 1225 1200 | 58,5-60,5 56,5-58,5 49,5-51,5 56,0-58,0 60,5-62,5 | 1270 1270 1270 1270 1240 1220 | 800 800 800 800 800 | 50,5-53,5 48,0-51,0 40,5-43,5 46,5-49,5 51,5-54,5 | 38,0 kW / n = 2500 37,0 kW / n = 2500 33,0 kW / n = 2500 36,8 kW (50 PS) / n = 2450 39,0 kW (53 PS) / n = 2400 |
| | 1200 1200 1175 1175 1150 | 58,0-60,0 54,5-56,5 59,5-60,5 50,5-51,5 59,0-61,0 | 1220 1220 1195 1195 1170 | 800 800 775 775 775 | 48,5-51,5 47,5-50,5 55,5-56,5 48,5-49,5 55,0-58,0 | 37,5 kW (51 PS) / n = 2400 36,0 kW / n = 2400 38,0 kW / n = 2350* 33,0 kW / n = 2350* 37,5 kW (51 PS) / n = 2300 |
| 1 | 1150 1150 1150 1150 1150 | 57,5-58,5 56,0-58,0 53,0-55,0 48,5-50,5 44,5-46,5 | 1170 1170 1170 1170 1170 | 775 800 775 800 800 | 56,0-57,0 52,0-55,0 48,5-51,5 44,0-47,0 38,5-41,5 | 37,0 kW / n = 2300* 36,0 kW / n = 2300 35,0 kW / n = 2300 32,0 kW / n = 2300 29,0 kW / n = 2300 |
| 1 | 1100 1095 1075 1075 1075 | 55,5-57,5 50,5-52,5 57,5-59,5 54,5-56,5 47,0-49,0 | 1120 1115 1090 1090 1095 | 775 775 775 775 800 | 52,5-55,5 53,5-56,5 54,5-57,5 51,5-54,5 44,0-47,0 | 35,3 kW (48 PS) / n = 2200 33,0 kW / n = 2190 36,0 kW (49 PS) / n = 2150 34,6 kW (47 PS) / n = 2150 31,0 kW / n = 2150 |
| 1 | 075 050 000 000 000 | 41,5-42,5 45,0-47,0 55,5-57,5 53,0-54,0 49,5-51,5 | 1090 1070 1015 1020 1015 | 775 800 775 775 775 | 37,5-39,5 43,5-46,5 53,5-56,5 58,0-59,0 47,5-50,5 | 25,8 kW (35 PS) / n = 2150 30,0 kW / n = 2100 33,9 kW (46 PS) / n = 2000 33,0 kW / n = 2000* 31,3 kW (42,5PS) / n = 2000 |
| 1 | 000 000 000 975 900 | 46,5-48,5 44,5-46,5 43,5-44,5 36,5-38,5 54,0-56,0 | 1020 1020 1020 995 910 | 800 800 775 800 775 | 45,0-49,0 43,5-46,5 46,5-47,5 33,0-36,0 53,0-56,0 | 30,0 kW / n = 2000 29,0 kW / n = 2000 28,0 kW / n = 2000* 22,0 kW / n = 1950 30,9 kW (42 PS) / n = 1800 |
| | * tractor | | | | | |
| | ٠ | | | | | E 1 11 100 4440 |
| 4 K E | En | | | | | Testoil-ISO 4113 |

| | ult-load stop temp 40°C (104°F) | Rotational- speed limitat | 39; | iel delivery iaracteristics | Output and speed |
|----------------------------|---|---------------------------------|-----------------------------|--|---|
| rev/min | cm ² /1000 strokes 2 | changed to) rev/min 3 | tev/min 4 | cm [®] 1000 strokes 5 | PS /U/min. |
| 3 L 91 | - PES 3 A 80 | D 410/3 RS 11 | 83 , · | 1324 | (F- or B-power output) (cont.) |
| 00 75 50 00 50 | 50,0-52,0 47,0-49,0 43,5-45,5 43,0-45,0 54,0-56,0 | 910 885 860 810 760 | 775 775 775 - - | 50,0-53,0 46,0-49,0 43,0-46,0 - | 29,4 kW (40 PS) / n = 1800 27,6 kW (37,5PS) / n = 1750 25,4 kW (34,5PS) / n = 1700 23,9 kW (32,5PS) / n = 1600 26,5 kW (36 PS) / n = 1500 |
| 50 00 | 50,0-52,0 42,0-44,0 | 760 620 | - | - | 25,0 kW (34 PS) / n = 1500 18,0 kW / n = 1200 |
| | | | | | |
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| | | | | | Testoil-ISO 4113 |
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En 417

| | f-load stop mp 40°C (104°F) | Rotational- speed limitat | (A) | el delivery eracteristics | Output and speed | | |
|--------------|-----------------------------------|------------------------------|--------------|------------------------------|---|--|--|
| rev/min 1 | cm [®] 1000 strokes 2 | changed to 3 rev/min 3 | rev/min 4 | cm=1000 strokes 5 | PS /U/min. | | |
| F 3 L 912 | - PES 3 A 80 | D 410/3 RS118 | 3,1324 | | Power output ICXN (10% above rate | | |
| 1500 | 54,5-56,5 | 1520 | - | - | 32,4kW(44 PS)(+10%) / n = 3000 | | |
| 1485 | 58,5-61,5 | 1495 | - | - | 35,0kW $(+10%)$ / n = 2970 | | |
| 1400 1325 | 55,0-57,0 57,0-59,0 | 1420 1340 | - | _ | 33,9kW(46 PS)(+10%) / n = 2800 34,6kW(47 PS)(+10%) / n = 2650 | | |
| 1250 | 54,5-56,5 | 1270 | - | - | 33,5kW(45,5PS)(+10%) / n = 2500 | | |
| 1200 1150 | 41, -43,5 59,0-61,0 | 1210 1170 | - | - | 22,0kW (+10%) / n = 2400 | | |
| 1150 | 55,0-57,0 | 1170 | - | _ | 34,6kW(47 PS)(+10%) / n = 2300 32,4kW(44 PS)(+10%) / n = 2300 | | |
| 1100 | 57,5-59,5 | 1110 | - | - | 33,0kW $(+10%)$ / $n = 2200$ | | |
| 1100 | 52,5-54,5 | 1120 | - | <u>-</u> | 30,9kW(42 PS)(+10%) / n = 2200 | | |
| 1075 1075 | 56,5-58,5 | 1090 | - | - | 32,4kW(44 PS)(+10%) / n = 2150 | | |
| 1000 | 53,0-55,0 53,5-55,5 | 1090 1015 | - | _ | 31,3kW(42,5PS)(+10%) / n = 2150 30,2kW(41 PS)(+10%) / n = 2000 | | |
| 1000 | 47,0-49,0 | 1015 | ~ | | 27,2kW(37 PS)(+10%) / n = 2000 | | |
| 900 | 57,0-59,0 | 910 | - | - | 29 kW (+10%) / n = 1800 | | |
| 900 | 53,0-55,0 | 910 | _ | - | 28 kW(38 PS)(+10%) / $n = 1800$ | | |
| 900 | 50,0-52,0 | 910 | - | - | 26,9kW(36,5PS)(+10%) / n = 1800 | | |
| 900 | 43,5-45,5 | 910 | - | - | (+10%) / n = 1800 | | |
| 750 | 58,5-60,5 | 760 | - | - | (+10%) / n = 1500 | | |
| 750 750 | 53,5-55,5 51,5-53,5 | 760 | - | - | 24,0kW $(+10%)$ / n = 1500 | | |
| 750 | 48,5-50,5 | 760 760 | - | - | 23,6kW(32 PS)(+10%) / n = 1500 22,4kW(30,5PS)(+10%) / n = 1500 | | |
| 750 | 47,0-49,0 | 760 | - | - | 22,0kW (+10%) / n = 1500 | | |
| 750 750 | 42,5-44,5 35,0-37,0 | 760 760 | - | - | 20,0kW (+10%) / n = 1500 16,8kW (+10%) / n = 1500 | | |
| Power out | put 15N (5% | above rated ou | tout) | | | | |
| 900 | 59,5-61,5 | 910 | - | - | 31,0kW (+5%) / n = 1800 | | |
| 900 | 52,0-54,0 | 910 | - | - | 29 kW $(+5\%)$ / n = 1800 | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | į | | | | Testoil-ISO 4113 | | |
| n | 1 | - | | İ | | | |
| | | 1 | - 1 | | | | |

A13

| (2) | M-load stop | Rotational speed immat | | el delivery practeristics | Output and speed |
|--------------------------------------|---|---|---------------------------------|---|---|
| | cm²/1000 strokes | Note changed to) rev/min 3 | rev/min* | cm ² 1000 strokes 5 | PS /U/min. |
| F 3 L 912 | - PES 3 A <u>75</u> | D 410/3 RS 118 | 3,1185 | (F- or B-pov | wer output) |
| 1500 1500 1400 1400 1325 | 58,5-60,5 54,5-56,5 65,0-67,0 60,5-62,5 61,0-63,0 | 1520 1520 1420 1420 1340 | 800 800 800 800 800 | 45,0-48,0 41,5-44,5 53,0-56,0 50,0-53,0 52,0-55,0 | 38,3 kW (52 PS) / n = 3000 34,6 kW (47 PS) / n = 3000 42,7 kW (58 PS) / n = 2800 40,5 kW (55 PS) / n = 2800 41,2 kW (56 PS) / n = 2650 |
| 1325 1300 1250 1250 1225 | 58,0-60,0 55,0-57,0 59,0-61,0 56,5-58,5 54,5-56,5 | 1340 1320 1270 1270 1270 | 800 800 800 800 800 | 49,5-52,5 46,5-49,5 53,5-56,5 50,5-53,5 48,5-51,5 | 39,0 kW (53 PS) / n = 2650 36,8 kW (50 PS) / n = 2600 39,7 kW (54 PS) / n = 2500 38,2 kW (52 PS) / n = 2500 36,8 kW (50 PS) / n = 2450 |
| 1200 1200 1150 1150 1100 | 58,0-60,0 56,0-58,0 56,5-58,5 51,5-53,5 53,5-55,5 | 1220 1220 1170 1170 1120 | 800 800 775 775 775 | 53,5-56,5 51,0-54,0 55,5-58,5 51,0-54,0 54,0-57,0 | 39,0 kW (53 PS) / n = 2400 37,5 kW (51 PS) / n = 2400 37,5 kW (51 PS) / n = 2300 34,6 kW (47 PS) / n = 2300 35,3 kW (48 PS) / n = 2200 |
| 1075 1075 1000 1000 1000 | 55,5-57,5 53,0-55,0 53,5-55,5 49,5-51,5 46,0-48,0 | 1090 1090 1015 1015 1015 | 775 775 775 775 - | 55,5-58,5 53,0-56,0 54,0-57,0 49,0-52,0 | 36,0 kW (49 PS) / n = 2150 34,6 kW (47 PS) / n = 2150 33,9 kW (46 PS) / n = 2000 31,3 kW (42,5PS) / n = 2000 27,2 kW (37 PS) / n = 2000 |
| 900 900 875 850 800 | 54,0-56,0 51,0-53,0 49,0-51,0 46,5-48,5 46,0-48,0 | 910 910 885 885 810 | 775 775 775 775 775 | 54,5-57,5 52,0-55,0 49,0-52,0 46,0-49,0 | 30,9 kW (42 PS) / n = 1800 29,4 kW (40 PS) / n = 1800 27,6 kW (37,5PS) / n = 1750 25,4 kW (34,5PS) / n = 1700 23,9 kW (32,5PS) / n = 1600 |
| 750 750 | 46,0-48,0 52,5-54,5 | 760 760 | - | - | 26,5 kW (36 PS) / n = 1500 25,0 kW (34 PS) / n = 1500 |
| ICXN-power | r output (10% | above rated ou | utput) | | |
| 1500 1400 1325 1250 1150 | 54,5-56,5 55,0-57,0 56,0-58,0 53,0-55,0 56,5-58,5 | 1520 1420 1340 1270 1170 | | - - - - | 32,4 kW (44 PS) / n = 3000 33,9 kW (46 PS) / n = 2800 34,6 kW (47 PS) / n = 2650 33,5 kW (45,5PS) / n = 2500 34,6 kW (47 PS) / n = 2300 |
| 1150 1100 1075 1075 1000 | 52,5-54,5 51,0-53,0 54,0-56,0 51,0-53,0 53,0-55,0 | 1170 1120 1090 1090 1015 | | - - - - | 32,4 kW (44 PS) / n = 2300 30,9 kW (42 PS) / n = 2200 32,4 kW (44 PS) / n = 2150 31,3 kW (42,5PS) / n = 2150 30,2 kW (41 PS) / n = 2000 |
| 1000 900 900 900 750 | 45,5-47,5 53,0-55,0 51,0-53,0 47,5-49,5 54,0-56,0 | 1015 910 910 910 910 760 | | | 27,2 kW (37 PS) / n = 2000 28,0 kW (38 PS) / n = 1800 26,9 kw (36,5PS) / n = 1800 25 kW / n = 1800 23,6 kW (32 PS) / n = 1500 |
| 750 En | 51,0-53,0 | 760 Test | ا ال | SO 411 | 22,4 kW (30,5PS) / n = 1500 |

| | unitoed stop | Rotational- speed limital Note changed to .) | @ : | vel delivery heracteristics | Output and speed PS /U/min. |
|--------------------------------------|---|---|--|---|---|
| rey/min 1 | imiki000 strokes | rev/min 3 | rev/min 4 | cm#1000 strokes 5 | |
| F4L | 912 - PES 4 | A <u>80</u> D 410/3 F | RS 1183 | 3, 1300. 2346 | (F- or B-power output) |
| 1400 1400 1350 1325 1325 | 63,5-65,5 61,0-63,0 52,5-54,5 62,5-64,5 58,0-60,0 | 1420 1420 1370 1340 1345 | 800 800 - 800 800 | 59,5-62,5 58,5-61,5 - 56,5-59,5 54,5-57,5 | 58,9 kW (80 PS) / n = 2800 57,0 kW / n = 2800 50,4 kW / n = 2700 56,7 kW (77 PS) / n = 2650 54,0 kW / n = 2650 |
| 1325 1250 1250 1250 1250 | 56,5-58,5 61,0-63,0 60,5-62,5 57,0-59,0 60,5-62,5 | 1345 1270 1270 1270 1270 1220 | 800 800 800 800 800 | 51,5-54,5 56,5-59,5 57,0-60,0 54,0-57,0 56,5-59,5 | 52,0 kW |
| 1200 1200 1150 1150 | 58,0-60,0 56,0-58,0 59,0-61,0 59,5-60,5 | 1220 1220 1170 1170 | - 800 775 800 | 52,5-55,5 59,5-62,5 60,5-61,5 | 52,0 kW / n = 2400 50,0 kW (68 PS) / n = 2400 51,5 kW (70 PS) / n = 2300 51,0 kW / n = 2300* |
| 1150 1150 1150 1150 1150 | 56,5-58,5 57,0-59,0 57,0-58,0 51,5-53,5 48,0-50,0 | 1170 1170 1170 1170 1170 | 775 800 800 775 - | 56,5-59,5 55,5-58,5 54,5-57,5 51,5-54,5 | 49,3 kW (67 PS) / n = 2300 49,0 kW / n = 2300 48,0 kW / n = 2300 45,6 kW (62 PS) / n = 2300 43,0 kW / n = 2300 |
| 1100 1100 1075 1075 1075 | 59,0-61,0 51,0-53,0 59,5-61,5 57,0-58,0 54,0-56,0 | 1120 1120 1090 1095 1090 | 775 775 775 775 775 775 | 58,5-61,5 51,5-54,5 58,5-61,5 62,0-63,0 54,0-57,0 | 50,0 kW (68 PS) / n = 2200 44,1 kW (60 PS) / n = 2200 49,3 kW (67 PS) / n = 2150 48,0 kW / n = 2150* 46,3 kW (63 PS) / n = 2150 |
| 1075 1065 1050 1025 | 48,0-50,0 54,0-55,0 54,0-56,0 49,0-51,0 | 1095 1085 1065 1040 | 800 800 775 775 | 49,0-52,0 60,0-61,0 54,0-57,0 49,5-52,5 | 42,0 kW / n = 2150 46,0 kW / n = 2130* 45,6 kW (62 PS) / n = 2100 41,2 kW (56 PS) / n = 2050 |
| | | | | | |

2b Full-load stop Test out temp 40°C (104°F) Rotational speed irritat (3a) Fuel delivery characteristics Output and speed - ..PS / ..U/min. changed to) rev/min rev/min cm#1000 strokes rev/min cm#1000 strokes

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| -1: | ļ: | | | | | | |
|--------------------------------------|---|--------------------------------------|-------------|--------|--|-------|--|
| F 4 L 91 | PES 4 A 8 | <u>0</u> D 410/3 RS | 1183,130 | 0,2346 | Power output-ICXN (10 | % abo | ve rated cutput) |
| 1150 1150 1100 1100 1075 | 58,5-60,5 52,0-54,0 52,0-54,0 48,5-50,5 57,0-59,0 | 1170 1170 1120 1120 1090 | | • | 46,3 kW (63 PS 42,7 kW (58 PS 41,2 kW (56 PS 39,0 kW (53 PS 44,1 kW (60 PS |) / | n = 2300 n = 2300 n = 2200 n = 2200 n = 2150 |
| 1075 1050 900 900 900 | 48,5-50,5 45,0-47,0 49,0-51,0 62,0-64,0 52,0-54,0 | 1090 1065 910 910 910 | | - | 38,5 kW (52,5PS 35,3 kW (48 PS 36,0 kW 40,0 kW 36,0 kW |) / | n = 2150 n = 2100 n = 1800 n = 1800 n = 1800 |
| 900 750 750 750 | 42,5-44,5 61,0-63,0 57,0-59,0 51,0-53,0 | 910 760 760 760 | - | - | 31,0 kW 34,0 kW 32,0 kW 29,0 kW | /// | n = 1800 n = 1500 n = 1500 n = 1500 |
| Power of | utput-I5N (5% 63,5-65,5 | above rated o | output) | - | 43,0kW | / | n = 1800 |
| | | | | (To | etoil-ISO 4113 | 3] | |

lestoll-150

| | Full-load stop temp 40°C (104°F) | Rotational speed limitat | 30 | vel delivery Paractenstics | Output and speed |
|--------------------------------------|---|--|---------------------------------|---|--|
| rev/min | 1 | changed to) styrmin 3 | rev/min 4 | cm#1000 strokes 5 | PS /U/min. |
| F 4 L 912 | - PES 4 A 75 | D 410/3 RS 118 | 3,125 | (F-or B- | power output) |
| 1500 1500 1500 1400 1325 | 56,0-58,0 50,5-52,5 48,5-50,5 54,5-56,5 53,0-55,0 | 1520 1520 1520 1520 1140 1345 | 800 800 800 800 | 43,0-46,0 37,0-40,0 35,0-38,0 49,5-52,5 | 51,5 kW (70 PS) / n = 3000 46,4 kW (63 PS) / n = 3000 44,2 kW (60 PS) / n = 3000 53,7 kW (73 PS) / n = 2800 52,0 kW / n = 2650 |
| 1250 1250 1150 1150 1150 | 52,0-54,0 42,5-44,5 54,5-56,5 51,5-53,5 48,5-50,5 | 1270 1270 1170 1170 1170 | 800 800 775 775 775 | 52,5-55,5 35,5-38,5 59,0-62,0 55,0-58,0 48,0-51,0 | 51,0 kW / n = 2500 38,0 kW / n = 2500 51,5 kW (70 PS) / n = 2300 49,3 kW (67 PS) / n = 2300 45,6 kW (62 PS) / n = 2300 |
| 1100 1100 1075 1075 1050 | 54,5-56,5 46,5-48,5 55,0-57,0 49,0-51,0 49,5-51,5 | 1120 1120 1090 1090 1065 | 775 775 775 775 775 | 59,0-62,0 48,0-51,0 58,0-61,0 52,0-55,0 52,0-55,0 | 50,0 kW (68 PS) / n = 2200 44,2 kW (60 PS) / n = 2200 49,3 kW (67 PS) / n = 2150 46,4 kW (63 PS) / n = 2150 45,6 kW (62 PS) / n = 2100 |
| 1025 1000 1000 950 900 | 44,5-46,5 48,5-50,5 55,0-57,0 45,5-47,5 56,5-58,5 | 1040 1020 1015 960 910 | 775 800 775 775 775 | 46,0-49,0 48,5-51,5 57,0-60,0 46,0-49,0 57,0-60,0 | 41,2 kW (56 PS) / n = 2050 47,0 kW / n = 2000 46,4 kW (63 PS) / n = 2000 39,7 kW (54 PS) / n = 1900 42,7 kW (58 PS) / n = 1800 |
| 900 875 800 750 750 | 51,5-53,5 45,5-47,5 46,5-48,5 56,5-58,5 52,0-54,0 | 910 885 810 760 760 | 775 775 - - - | 52,0-55,0 46,0-49,0 - - | 40,5 kW (55 PS) / n = 1800 36,8 kW (50 PS) / n = 1750 33,5 kW (45,5 PS) / n = 1600 35,3 kW (48 PS) / n = 1500 33,9 kW (46 PS) / n = 1500 |
| • | output (10% | above rated out | put) | | |
| 1500 1400 1325 1250 1150 | 50,5-52,5 51,0-53,0 51,5-53,5 50,0-52,0 53,0-55,0 | 1520 1420 1340 1270 1170 | - | - | 43,4 kW (59 PS) / n = 3000 44,9 kW (61 PS) / n = 2800 45,6 kW (62 PS) / n = 2650 44,2 kW (60 PS) / n = 2500 46,4 kW (63 PS) / n = 2300 |
| 1150 1100 1100 1075 1075 | 48,5-50,5 47,0-49,0 44,0-46,0 52,0-54,0 45,0-47,0 | 1170 1120 1120 1090 1090 | - | - - - | 42,7 kW (58 PS) / n = 2300 41,2 kW (56 PS) / n = 2200 39,0 kW (53 PS) / n = 2200 44,2 kW (60 PS) / n = 2150 38,4 kW (52,2 PS) / n = 2150 |
| 1050 1000 1000 900 900 | 40,5-42,5 52,0-54,0 47,0-49,0 54,5-56,5 49,0-51,0 | 1065 1015 1015 910 910 | | - | 35,3 kW (48 PS) / n = 2100 41,2 kW (56 PS) / n = 2000 39,0 kW (53 PS) / n = 2000 38,3 kW (52 PS) / n = 1800 33,9 kW (49 PS) / n = 1800 |
| 900 875 750 750 750 | 40,5-42,5 43,5-46,5 53,5-55,5 49,0-51,0 42,5-44,5 | 910 885 760 760 760 | - | - | 31,0 kW / n = 1800 32,4 kW (44 PS) / n = 1750 31,6 kW (43 PS) / n = 1500 30,2 kW (41 PS) / n = 1500 26,5 kW / n = 1500 |
| 750 | 36,0-38,0 | 760 | _ | . | 25,5 kW / n = 1500 |

En 422

| • | ell-load stop temp 40°C (104°F) | Rotational- apped irritat | 3 | uel delivary teracteristics | Output and speed |
|--------------------------------------|---|--|---------------------------------|---|--|
| | cm#r1000 strokes | changed to 3 rev/min 3 | rev/min 4 | cm#1000 strokes 5 | PS /U/min. |
| F 5 L 912 | 2 - PES 5 A 8 | 0 D 410/3 RS 23 | 27 , 234 | 7, (F- or | B power output) |
| 1500 1500 1400 1400 1325 | 55,0-57,0 50,0-52,0 63,5-65,5 58,0-60,0 61,5-63,5 | 1520 1 4 20 | 800 800 800 800 800 | 40,5-43,5 36,5-39,5 55,0-58,0 48,5-51,5 54,0-57,0 | 57,4 kW (78 PS) / n = 3000 73,6 kW (100PS) / n = 2800 67,7 kW (92 PS) / n = 2800 |
| 1325 1300 1250 1250 1250 | 55,5-57,5 54,5-56,5 59,5-61,5 56,0-58,0 54,5-56,5 | 1340 1320 1270 1270 1270 | 800 800 800 800 800 | 48,0-51,0 46,5-49,5 54,5-57,5 50,5-54,0 52,0-55,0 | 68,4 kW (93 PS) / n = 2500 |
| 1200 1200 1200 1175 1150 | 58,0-60,0 52,5-54,5 50,0-52,0 57,5-59,5 57,0-59,0 | 1220 1220 1220 1220 1195 1170 | 800 800 800 800 775 | 56,0-59,0 48,0-51,0 46,5-49,5 58,5-61,5 56,0-59,0 | 66,2 kW (90 PS) / n = 2400 61,1 kW (83 PS) / n = 2400 58,5 kW / n = 2400 66,0 kW / n = 2350 64,8 kW (88 PS) / n = 2300 |
| 1150 1150 1150 1150 1150 | 53,0-55,0 47,5-49,5 46,0-48,0 40,0-42,0 55,5-57,5 | 1170 1170 1170 1170 1170 1120 | 775 800 800 800 775 | 54,0-57,0 48,5-51,5 41,5-44,5 29,0-32,0 56,0-59,0 | 61,0 kW (83 PS) / n = 2300 55,0 kW / n = 2300 53,0 kW / n = 2300 41,0 kW / n = 2300 62,6 kW (85 PS) / n = 2200 |
| 1100 1075 1075 1000 1000 | 45,5-47,5 55,5-57,5 47,5-49,5 55,0-57,0 47,0-49,0 | 1120 1090 1090 1095 1015 | 775 775 775 775 775 | 43,5-46,5 56,0-59,0 47,5-50,5 55,5-58,5 47,5-50,5 | 54,5 kW (74 PS) / n = 2150 |
| 950 925 900 900 900 | 51,0-53,0 54,0-56,0 55,0-57,0 46,0-48,0 43,5-45,5 | 970 945 910 910 920 | 800 775 775 775 775 | 52,5-59,5 56,0-59,0 55,5-58,5 47,5-50,5 45,0-48,0 | 53,0 kW / n = 1900 54,0 kW / n = 1850 53,0 kW (72 PS) / n = 1800 47,1 kW (64 PS) / n = 1800 46,0 kW / n = 1800 |
| 750 750 | 55,5-57,5 47,5-49,5 | 760 760 | - | - | 44,2 kW (60 PS) / n = 1500 39,7 kW (54 PS) / n = 1500 |
| | | | | | |
| | | | | | Testoil-ISO 4113 |

| (2b) Full-load stop Test oil temp 40°C (104°F) | | Note | Rotational- speed limitat | | Output and speed |
|---|----------------------|------------------------|------------------------------|-----------------|------------------|
| tevimin | cm#1000 strokes 2 | changed to) rev/min 3 | rev/min 4 | cm=1000 strokes | PS /U/min. |
| | | | | | |
| | | | | | |

F 5 L 912 - PES 5 A <u>80</u> D 410/3 RS 2327,2347 ICXN-power output (10% above rated output)

| 1500 1400 1325 1250 1150 | 50,5-52,5 52,5-54,5 53,5-55,5 52,5-54,5 55,5-57,5 | 1520 1420 1340 1270 1170 | - | - | 53,7 kW (73 PS) / n = 30 10 56,0 kW (76 PS) / n = 2800 57,4 kW (78 PS) / n = 2650 56,0 kW (76 PS) / n = 2500 58,1 kW (79 PS) / n = 2300 |
|--|---|--------------------------------------|---|------------------|---|
| 1150 1075 1075 1000 1000 | 50,0-52,0 53,5-55,5 49,5-51,5 58,0-60,0 53,0-55,0 | 1170 1090 1090 1010 1015 | - | - - - | 53,7 kW (73 PS) / n = 2300 55,2 kW (75 PS) / n = 2150 51,5 kW (70 PS) / n = 2150 55,0 kW / n = 2000 52,3 kW (71 PS) / n = 2000 |
| 1000 900 900 860 750 | 48,0-50,0 54,5-56,5 49,0-51,0 49,5-51,5 58,5-60,5 | 1015 910 910 870 760 | - | - - - - | 48,6 kW (66 PS) / n = 2000 47,8 kW (65 PS) / n = 1800 44,9 kW (61 PS) / n = 1800 43,4 kW (59 PS) / n = 1725 42,0 kW / n = 1500 |
| 750 750 750 750 750 750 | 54,0-56,0 52,5-54,5 47,0-49,0 44,0-46,0 42,0-44,0 | 760 760 760 760 760 | - | - - - - | 39,7 kW (54 PS) / n = 1500 39,0 kW / n = 1500 36,0 kW / n = 1500 34,6 kW (47 PS) / n = 1500 34,0 kW / n = 1500 |
| | | | | | |

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| | | • | | • | | |
|---------|-----------------------------------|------------------------------|---------|---|------------------|--|
| | ull-load stop emp_40°C (104°F) | Rotational- speed limitat | 39: | uel delivery haracteristics | Output and speed | |
| rev/mir | cm ² 1000 strokes | changed to) rev/min 3 | rev/min | cm ² r1000 strokes | PS /U/min. | |

F 6 L 912 - PES 6 A 80 D 410/3 RS 2273, 2348 (F- or B power output)

| 1450 1400 1400 1400 1375 | 52,0-54,0 64,0-66,0 64,0-66,0 57,0-59,0 63,5-65,5 | 1470 - 1420 1420 1390 | 800 675 800 800 800 | 33,5-36,5 56,5-59,5 53,5-56,5 45,0-48,0 52,5-55,5 | 88,3 kW (120PS) 88,3 kW (120PS) 78,0 kW | / n = 2800* / n = 2800 / n = 2800 |
|--------------------------------------|---|--------------------------------------|---------------------------------|---|---|---|
| 1375 1325 1250 1250 1250 | 60,5-62,5 64,5-66,5 62,0-64,0 61,0-63,0 59,0-61,0 | 1390 1345 1270 1270 1270 | 800 800 800 800 | 48,5-51,5 - 52,5-55,5 50,0-53,0 48,5-51,5 | 87,0 kW 82,4 kW (112PS) 81,0 kW (110PS) | / n = 2650 / n = 2500 / n = 2500 |
| 1250 1200 1200 1150 1150 | 58,0-60,0 59,5-61,5 55,0-57,0 58,0-60,0 56,0-58,0 | 1270 1220 1220 1170 1170 | - 800 800 775 | 51,5-54,5 50,0-53,0 54,0-57,0 53,0-56,0 | 74,3 kW 78,0 kW (106PS) | / n = 2400 / n = 2300 |
| 1150 1100 1075 1075 1000 | 55,0-57,0 55,0-57,0 55,0-57,0 53,0-55,0 48,5-50,5 | 1170 1120 1090 1090 1020 | 800 775 775 775 800 | 52,0-55,0 53,5-56,5 53,5-56,5 50,0-53,0 48,5-51,5 | 73,6 kW (100PS) 73,6 kW (100PS) 69,9 kW (95PS) | / n = 2150 |
| 900 750 | 47,5-49,5 50,5-52,5 | 920 770 | 600 - | 48,0-51,0 - | 44,0 kW 51,0 kW | / n = 1800 / n = 1500 |

ICXN power output (10% above rated output)

| | 8 | | 1 | 1 | 1 |
|------------|------------------------|----------------|--------|--------|--------------------------|
| 900 750 | 45,0-47,0 58,0-60,0 | 910 760 | - | - - | 54,5 kW (+ 51,0 kW (+ |
| 750 | 54,5-56,5 | 760 | - | - | 48,0 kW (+ |
| 750 750 | 50,5-52,5 39,5-41,5 | 760 760 | - | - - | 44,0 kW (+ 39,0 kW (+ |
| I5N-powe | r output (5% | above rated ou | itput) | | |
| 900 750 | 54,4-56,5 52,0-54,0 | 910 760 | - | - | 63,0 kW (+ 50,0 kW (+ |
| | | | | | |

+10%) / n = 1800+10%) / n = 1500

+10%) / n = 1500

+10%) / n = 1500+10%) / n = 1500

/ n = 1800 / n = 1500

* valid for pump combinations with RQ governor

F6L912 - PES 6 A 75 D 410/3 RS 1197 (F-or B-power output)

| | ull-load stop emp 40°C (104°F) | Rotational- speed limitat | @: | uel delivery haracteristics | Output and speedPS /U/min. |
|---------|-----------------------------------|------------------------------|---------|--------------------------------|----------------------------|
| rev/min | cm ³ /1000 strokes | changed to) rev/min | rev/min | cm³/1000 strokes | rs /u/iii/ii. |
| 1 | 2 | 3 | 4 | 5 | |
| | 1 | | 1 | 1 | |

| | = | | | , . , . | |
|--------------------------------------|---|--|--|---|---|
| 1500 1500 1500 1400 1325 | 56,0-58,0 55,0-57,0 51,0-53,0 57,5-59,5 51,5-53,5 | 1520 1520 1520 1520 1420 1345 | 800 800 800 800 800 | 40,5-43,5 37,0-40,0 35,0-38,0 50,5-53,5 45,0-48,0 | 76,5 kW (104 PS) / n = 3000 73,6 kW (100 PS) / n = 3000 69,2 kW (94 PS) / n = 3000 81,0 kW (110 PS) / n = 2800 73,5 kW / n = 2650 |
| 1250 1250 1250 1200 1150 | 53,0-55,0 51,5-53,5 49,0-51,0 51,0-53,0 50,0-52,0 | 1270 1270 1270 1270 1220 1170 | 800 800 800 750 775 | 51,0-54,0 50,5-53,5 48,5-51,5 52,0-55,0 52,0-55,0 | 76,0 kW / n = 2500 74,0 kW / n = 2500 69,0 kW / n = 2500 74,0 kW / n = 2400 74,0 kW / n = 2300 |
| 1050 1000 1000 1000 1000 | 42,0-44,0 50,5-52,5 46,0-48,0 44,5-46,5 36,0-38,0 | 1065 1015 1015 1020 1020 | 775 775 775 775 775 800 | 39,5-42,5 55,5-58,5 51,5-54,5 48,5-51,5 33,0-36,0 | 58,9 kW (80 PS) / n = 2100 69,9 kW (95 PS) / n = 2000 66,2 kW (90 PS) / n = 2000 62,5 kW / n = 2000 46,0 kW / n = 2000 |
| 975 950 950 950 950 | 48,5-50,5 51,5-53,5 45,5-47,5 42,0-44,0 37,5-39,5 | 985 970 970 960 970 | 775 775 800 775 775 | 52,5-55,5 55,0-58,0 48,0-51,0 42,0-45,0 37,0-40,0 | 66,2 kW (90 PS) / n = 1950 67,0 kW / n = 1900 61,0 kW / n = 1900 56,7 kW (77 PS) / n = 1900 50,0 kW / n = 1900 |
| 900 | 53,5-55,5 | 910 | 775 | 54,5-57,5 | 64,0 kW (87 PS) / n = 1800 |

| | ull-load stop emp 40°C (104°F) | Rotational- speed limitat | 39 ; | el delivery Bracteristics | Output and speedPS /U/min. |
|--------------------------------------|---|--------------------------------------|--------------|------------------------------------|--|
| rev/min 1 | cm ² r1000 strokes 2 | changed to) rev/min 3 | rev/min 4 | cm [®] r1000 strokes 5 | P3 /U/min. |
| F6L912 | - PES 6 A 75 | D 410/3 RS 119 | 7,1326 | ICXN power | er output (10% above rated output) |
| 1500 1400 1325 1250 1150 | 52,5-54,5 53,5-55,5 53,5-55,5 51,0-53,0 52,5-54,5 | 1520 1420 1340 1270 1170 | | - - - - | 64,8 kW (88 PS) / n = 3000 67,7 kW (92 PS) / n = 2800 69,2 kW (94 PS) / n = 2600 67,0 kW (91 PS) / n = 2500 69,9 kW (95 PS) / n = 2300 |
| 1150 1100 1075 1075 1000 | 49,0-51,0 45,0-47,0 49,5-51,5 47,0-49,0 50,5-52,5 | 1170 1120 1090 1090 1020 | 1111 | - - - - | 64,8 kW (88 PS) / n = 2300 58,9 kW (80 PS) / n = 2200 66,2 kW (90 PS) / n = 2150 62,6 kW (85 PS) / n = 2150 63,0 kW / n = 2000 |
| 1000 900 900 875 | 45,0-47,0 52,0-54,0 47,5-49,5 46,5-48,5 | 1015 910 910 885 | | - - - - | 58,9 kW (78 PS) / n = 2000 57,4 kW (78 PS) / n = 1800 53,7 kW (73 PS) / n = 1800 51,5 kW (70 PS) / n = 1750 |
| 750 750 | 53,5-55,5 49,0-51,0 | 760 760 | | - | 47,8 kW (65 PS) / n = 1500 44,9 kW (61 PS) / n = 1500 |

| Test oil te | emp 40°C (104°F) | Rotational- Note changed to) rev/min | | et delivery aracteristics cm [®] 1000 strokes | Output and speed PS /U/min. |
|---|--|--|--|---|--|
| 1 | 2 | 3 | 4 | 5 | |
| BF6L91 | 12 - PES 6 A | 85 D 410/3 RS 2 | 278,2 | 348 (F-power | output) |
| 1400 1400 1400 1325 1325 | 76,5-78,5 73,0-75,0 70,0-72,0 76,5-78,5 73,5-75,5 | 1420 1420 1420 1340 1340 | 800 800 800 800 800 | 69,5-72,5 61,5-64,5 52,5-55,5 74,5-77,5 64,5-67,5 | 103,0 kW (140PS) / n = 2800 95,7 kW (130PS) / n = 2800 88,3 kW (120PS) / n = 2800 103,0 kW (140PS) / n = 2650 95,7 kW (130PS) / n = 2650 |
| 1325 1325 1250 1250 1250 | 70,0-72,0 66,0-68,0 76,5-78,5 73,0-75,0 69,5-71,5 | 1340 1340 1270 1270 1270 | 800 800 800 800 800 | 56,5-59,5 47,5-50,5 77,5-80,5 69,5-72,5 60,5-63,5 | 88,3 kW (120PS) / n = 2650 81,0 kW (110PS) / n = 2650 103,0 kW (140PS) / n = 2500 95,7 kW (130PS) / n = 2500 88,3 kW (120PS) / n = 2500 |
| 1200 1200 1150 1150 1150 | 73,0-75,0 69,0-71,0 72,0-74,0 68,0-70,0 63,0-65,0 | 1250 1220 1170 1170 1170 | 800 800 775 775 775 | 75,5-78,5 61,5-64,5 76,5-79,5 67,5-70,5 58,5-61,5 | 99,4 kW (135PS) / n = 2400 88,3 kW (120PS) / n = 2400 95,7 kW (130PS) / n = 2300 88,3 kW (120PS) / n = 2300 81,0 kW (110PS) / n = 2300 |
| 1100 1075 1075 1050 1000 | 68,0-70,0 64,0-66,0 62,0-64,0 59,0-60,5 62,0-64,0 | 1120 1090 1090 1065 1015 | 775 775 775 775 775 775 | 75,5-78,5 67,5-70,5 62,5-65,5 58,5-61,5 69,5-72,5 | 92,0 kW (125PS) / n = 2200 84,0 kW (115PS) / n = 2150 81,0 kW (110PS) / n = 2150 76,5 kW (104PS) / n = 2100 59,6 kW (110PS) / n = 2000 |
| 1000 900 900 875 750 | 59,0-61,0 60,0-62,0 56,5-58,5 58,5-61,0 63,0-65,0 | 1015 910 910 885 760 | 775 775 775 775 - | 62,5-65,5 66,5-69,5 61,5-64,5 62,5-65,5 | 76.5 kW (104PS) / n = 2000 73,6 kW (100PS) / n = 1800 69,9 kW (95PS) / n = 1800 69,9 kW (95PS) / n = 1750 61,1 kW (83PS) / n = 1500 |
| 750 | 59,0-61,0 | 760 | - | - | 59,0 kW (80PS) / n = 1500 |
| I CXN pa | wer output (| ' 10% above rated | ı outpu | t) | |
| 1150 1075 1000 900 900 750 | 68,0-70,0 64,0-66,0 61,5-63,5 59,0-61,0 47,0-49,0 63,0-65,0 | 1170 1090 1015 910 910 760 | - | - | 81,0 kW (110PS) / n = 2300 77,3 kW (105PS) / n = 2150 73,6 kW (100PS) / n = 2000 66,2 kW (90PS) / n = 1800 55,9 kW (76PS) / n = 1500 55,9 kW (76PS) / n = 1500 |
| | | | | | toil-ISO 4113 |

| C. S | ettings for | Fuel Injection | n Pur | np with Fit | tea Governor -29- |
|--------------------------------------|---|--|--|---|--|
| | temp 40°C (104°F) | 6 Rotational- speed limital | @ : | uel delivery haracteristics | Output and speed |
| | cm%1000 strokes | changed to 3 rev/min 3 | rev/min 4 | cm#1000 strokes 5 | PS /U/min. |
| F3L9 | 12 W - PES 3 | A 75 D 410/3 RS | 1183 | (F-power o | utput) |
| 1400 1400 1325 1325 1250 | 61,0-63,0 57,5-59,5 59,0-61,0 57,0-59,0 58,5-60,5 | 1420 1420 1340 1340 1270 | 800 800 800 800 800 | 53,0-56,0 50,0-53,0 53,0-56,0 50,5-53,5 54,0-57,0 | 36,8 kW (50 PS) / n = 2800 34,6 kW (47 PS) / n = 2800 35,3 kW (48 PS) / n = 2650 33,9 kW (46 PS) / n = 2650 42,0 kW (57 PS) / n = 2500 |
| 1250 1250 1250 1250 1250 | 56,5-58,5 53,5-55,5 51,5-53,5 49,5-51,5 41,0-43,0 | 1270 1270 1270 1270 1270 1270 | 800 775 800 800 775 | 54,5-54,5 50,5-53,5 46,0-49,0 44,0-47,0 34,0-37,0 | 33,1 kW (45 PS) / n = 2500 32,0 kW / n = 2500 29,4 kW (40 PS) / n = 2500 28,0 kW (38 PS) / n = 2500 20,0 kW / n = 2500 |
| 1150 1150 1150 1100 1075 | 57,0-59,0 53,5-55,5 49,5-51,5 48,5-50,5 55,0-57,0 | 1170 1170 1170 1170 1120 1090 | 775 775 775 775 775 775 | 54,0-57,0 50,0-53,0 44,5-47,5 44,0-47,0 53,0-56,0 | 32,4 kW (44 PS) / n = 2300 30,2 kW (41 PS) / n = 2300 26,9 kW (36,5PS)/ n = 2300 25,8 kW (35 PS) / n = 2200 30,2 kW (41 PS) / n = 2150 |
| 1075 1075 1050 1000 1000 | 53,0-55,0 49,0-51,0 50,0-52,0 54,5-56,5 50,0-52,0 | 1090 1090 1090 1015 1015 | 775 775 775 775 775 775 | 50,0-53,0 44,5-47,5 47,0-50,0 53,5-56,5 47,5-50,5 | 28,7 kW (39 PS) / n = 2150 25,8 kW (35 PS) / n = 2150 26,5 kW (36 PS) / n = 2100 28,7 kW (39 PS) / n = 2000 26,8 kW (35 PS) / n = 2000 |
| 900 900 900 750 750 | 53,0-55,0 51,5-53,5 48,5-50,5 52,5-54,5 47,0-49,0 | 910 910 910 760 760 | 775 775 775 - - | 44,0-47,0 50,5-53,5 47,0-50,0 - - | 26,1 kW (35,5PS)/ n = 1800 25,0 kW (34 PS) / n = 1800 23,6 kW (32 PS) / n = 1800 22,1 kW (30 PS) / n = 1500 19,9 kW (27 PS) / n = 1500 |
| ICXN pow | er output (10 | 0% above rated o | utput | | |
| 1150 1150 1075 1075 1000 | 54,5-56,5 49,5-51,5 54,0-56,0 49,5-51,5 53,0-55,0 | 1170 1170 1090 1090 1015 | - - - | - - - - | 28,7 kW (39 PS) / n = 2300 25,0 kW (34 PS) / n = 2300 27,2 kW (37 PS) / n = 2150 24,3 kW (33 PS) / n = 2150 25,8 kW (35 PS) / n = 2000 |
| 1000 900 900 750 750 | 49,5-51,5 52,5-54,5 48,0-50,0 54,5-56,5 51,0-53,0 | 1015 910 910 760 760 | - | - - - - | 23,6 kW (32 PS) / n = 2000 23,6 kW (32 PS) / n = 1800 21,3 kW (29 PS) / n = 1800 21,0 kW / n = 1500 19,9 kW (27 PS) / n = 1500 |
| 750 | 45,4-47,5 | 760 | - | - | 17,7 kW (24 PS) / n = 1500 |
| | | | | Te | estoil-ISO 4113 |
| | | | ł | ł | |

| | | | | | ted dovernor | 50 |
|--------------|------------------------------------|------------------------------|------------|--------------------------------|--|----|
| | ull-load stop temp 40°C (104°F) | Rotational- speed limitat | 30; | uel delivery varacteristics | Output and speed | |
| | cm%1000 strokes | changed to 3 rev/min | rev/min | cm=1000 strokes | PS /U/min. | |
| 1 | 2 | 3 | 4 | 5 | | |
| F4L912 | W - PES 4 A | 75 D 410/3 RS | 1183 | (F power out | put) | |
| 1400 | 58,5-60,5 | | 800 | 52,0-55,0 | 49,3 kW (67 PS) / n = 280 | |
| 1400 1325 | 55,0-57,0 56,0-58,0 | 1420 1340 | 800 800 | 48,5-51,5 51,0-54,0 | 46,4 kW (63 PS) / n = 280 47,1 kW (64 PS) / n = 265 | |
| 1325 | 53,5-55,5 | 1340 | 800 | 48,5-51,5 | 44,9 kW (61 PS) / n = 265 | |
| 1300 | 53,0-55,0 | 1320 | 800 | 48,5-51,5 | 44,2 kW (60 PS) / n = 260 | |
| 1250 | 55,0-57,0 | 1270 | 800 | 52,0-55,0 | 45,6 kW (62 PS) / n = 250 | |
| 1250 1250 | 53,5-55,5 52,5-54,5 | 1270 1270 | 775 800 | 50,5-53,5 48,5-51,5 | 44,0 kW | |
| 1250 | 49,5-51,5 | 1270 | 800 | 45,0-48.0 | 39,7 kW (54 PS) / n = 250 | |
| 1250 | 49,5-51,5 | 1270 | 775 | 47,5-50,5 | 38,0 kW / n = 250 | |
| 1250 1150 | 49,0-50,0 54,5-56,5 | 1270 1170 | 800 775 | 46,5-49,5 | 38,0 kW (51 PS) / $n = 250$ | |
| 1150 | 51,5-53,5 | 1170 | 775 | 52,5-55,5 48,5-51,5 | 43,4 kW (59 PS) / n = 230 40,5 kW (55 PS) / n = 230 | |
| 1150 | 50,5-52,5 | 1170 | 775 | 47,5-50,5 | 39,4 kW (53,5PS)/n = 230 | 0 |
| 1150 | 47,5-49,5 | 1170 | 775 | 44,0-47,0 | 36,1 kW (49 PS) / n = 230 | 0 |
| 1150 1100 | 46,5-48,5 46,5-48,5 | 1170 1120 | 775 775 | 43,0-46,0 44,0-47,0 | 35,0 kW / n = 230 34,6 kW (47 PS) / n = 220 | |
| 1100 | 44,5-46,5 | 1120 | 775 | 41,0-44,0 | 32,4 kW (44 PS) / n = 2200 | |
| 1075 | 52,0-54,0 | 1090 | 775 | 50,0-53,0 | 39,7 kW (54 PS) / n = 2150 | 0 |
| 1075 | 50,5-52,5 | 1090 | 775 | 48,5-51,5 | 38,3 kW (52 PS) / n = 215 | 0 |
| 1075 1000 | 46,5-48,5 52,0-54,0 | 1090 1015 | 775 775 | 44,0-47,0 52,0-55,0 | 34,2 kW (46,5PS)/n = 2150 | |
| 1000 | 49,5-51,5 | 1015 | 775 | 48,5-51,5 | 38,3 kW (52 PS) / n = 2000 36,1 kW (49 PS) / n = 2000 | |
| 1000 | 46,5-48,5 | 1015 | 775 | 44,5-47,5 | 33,1 kW $(45 PS) / n = 2000$ | 0 |
| 900 | 51,0-53,0 | 910 | 775 | 50,0-53,0 | 34,6 kW (47 PS) / n = 1800 | |
| 900 900 | 47,5-49,5 45,5-47,5 | 910 910 | 775 775 | 47,0-50,0 44,5-47,5 | 31,6 kW (43 PS) / n = 1800 30,5 kW (41,5PS)/ n = 1800 | |
| 750 | 51,0-53,0 | 760 | - | - | 29,4 kW (40 PS) / n = 1500 | |
| 750 | 47,5-49,5 | 760 | - | - | 27,2 kW (37 PS) / n = 1500 |) |
| 750 · | 45,0-47,0 J | 760 · | - | - | 25,8 kW (35 PS) / n = 1500 | J |
| ICXN pow | er output (1 | 0: above rated c | utput | | | |
| 1200 | 48,5-50,5 | 1220 | - | - [| 34,2 kW (46,5PS)/n = 2400 | |
| 1150 1150 | 52,5-54,5 47,0-49,0 | 1170 1170 | - 1 | - 1 | 38,3 kW (52 PS) / n = 2300 33,1 kW (45 PS) / n = 2300 | |
| 1075 | 51,5-53,5 | 1090 | - | - 1 | 36,1 kW (49 PS) / n = 2150 | |
| 1075 | 47,5-49,5 | 1090 | - | - | 32,4 kW (44 PS) / n = 2150 | |
| 1000 | 51,0-53,0 | 1015 | - | - 1 | 34,6 kW (47 PS) / n = 2000 | |
| 1000 900 | 47,5-49,5 | 1015 | : | - | 31,6 kW (43 PS) $/ n = 2000$ | |
| 900 | 51,0-53,0 46,5-48,5 | 910 910 | _ | - 1 | 31,6 kW (43 PS) / n = 1800 28,7 kW (39 PS) / n = 1800 | |
| 750 | 50,0-52,0 | 760 | - | - | 26,5 kW (36 PS) / n = 1500 | |
| 750 | 44,5-46,5 | 760 | - | - | 23,6 kW (32 PS) / n = 1500 |) |
| | | | | | | |

| C. 50 | ettings for | ruei injection | חטים י | np with Fit | ted Governor -31- |
|--------------------------------------|---|------------------------------------|---------------------------------|---|--|
| | ull-load stop lemp 40°C (104°F) | Rotational speed limitat | @ ; | et delivery eracteristics | Output and speed |
| rev/min | cm%1000 strokes 2 | changed to) rev/min 3 | rev/min 4 | cm=11000 strokes 5 | PS /U/min. |
| F5L91 | 2 W - PES 5 | A <u>80</u> D 410/3 RS | 2347 | (F-power ou | itput) |
| 1400 1400 1325 1325 1325 | 56,0-58,0 53,0-55,0 55,0-57,0 53,0-55,0 42,0-44,0 | 1420 1340 1340 | 800 800 800 800 800 | 48,5-51,5 50,5-53,5 48,5-51,5 | 58,1 kW (79 PS) / = n 2800 58,9 kW (80 PS) / = n 2650 56,7 kW (77 PS) / = n 2650 |
| 1250 1250 1250 1250 1250 | 55,0-57,0 53,0-55,0 49,5-51,5 46,0-48,0 54,0-56,0 | 1270 1270 1270 | 800 800 800 800 800 | 49,5-52,5 46,5-49,5 42,0-45,0 | 55,2 kW (75 PS) / n = 2500 51,5 kW (70 PS) / n = 2500 46,4 kW (63 PS) / n = 2500 |
| 1200 1150 1150 1150 1150 | 51,5-53,5 53,5-55,5 51,0-53,0 50,0-52,0 47,5-49,5 | 1170 1170 1170 | 800 775 775 775 775 | 51,5-54,5 51,5-54,5 48,0-51,0 | 54,5 kW (74 PS) / n = 2300 52,0 kW / n = 2300 50,0 kW (68 PS) / n = 2300 |
| 1150 1150 1150 1150 1150 | 46,0-48,0 45,0-47,0 44,5-46,5 43,5-45,5 42,0-44,0 | 1170 1170 1170 | 775 775 775 775 775 | 43,0-47,0 42,5-45,5 42,0-45,0 | 44,0 kW / n = 2300 43,0 kW / n = 2300 41,5 kW / n = 2300 |
| 1150 1150 1075 1075 1075 | 41,5-43,5 40,5-42,5 51,0-53,0 49,5-51,5 45,5-47,5 | 1170 | 775 775 775 775 775 | 37,0-40,0 49,5-52,5 | 37,0 kW / n = 2300 50,0 kW (68 PS) / n = 2150 47,8 kW (65 PS) / n = 2150 |
| 1000 1000 1000 900 900 | 50,5-52,5 49,0-51,0 45,0-47,0 50,0-52,0 48,5-50,5 | 1015 1015 1015 910 910 | 775 775 775 775 775 | 51,0-54,0 48,5-51,5 44,5-47,5 49,5-52,5 48,5-51,5 | 45,6 kW (62 PS) / n = 2000 41,2 kW (56 PS) / n = 2000 43,4 kW (59 PS) / n = 1800 |
| 900 750 750 750 | 45,0-47,0 50,5-52,5 46,5-48,5 44,5-46,5 | 910 760 760 760 760 | 775 - - - | 44,5-47,5 - - - - | 38,3 kW (52 PS) / n = 1800 36,8 kW (50 PS) / n = 1500 33,9 kW (46 PS) / n = 1500 32,4 kW (44 PS) / n = 1500 |
| | | , | | | |

| C. S | ettings for | Fuel Injection | r Pùn | np with Fit | ted Governor | -32- |
|--------------------------------------|---|---|-------|---|---|--|
| Test oil | ull-load stop temp 40°C (104°F) cm3r1000 strokes | Rotational- speed limitat Note changed to) rev/min | | uel delivery haracteristics cm ² /1000 strokes | Output and speed PS /U/min | |
| <u>,</u> F5L9 | 12 W - PES 5 | 3 A 80 D 410/3 RS | 2347 | ICXN power | output (10% above ra | ted output) |
| 1150 1150 1075 1075 1000 | 51,0-53,0 46,0-48,0 50,5-52,5 46,5-48,5 49,0-51,0 | | - | - | 47,8 kW (65 PS) / 42,0 kW (57 PS) / 45,6 kW (62 PS) / 40,5 kW (55 PS) / 42,7 kW (58 PS) / | n = 2300 n = 2300 n = 2150 n = 2150 |
| 1000 900 900 750 750 | 46,0-48,0 49,0-51,0 45,0-47,0 49,0-51,0 44,0-46,0 | 1015 910 910 760 760 | | - - - - | 39,0 kW (53 PS) / 39,0 kW (53 PS) / 35,3 kW (48 PS) / 33,1 kW (45 PS) / 29,4 kW (40 PS) / | n = 1800 n = 1800 n = 1500 |
| | | | | | | |
| c | | | | Testo | il-ISO 4113 | |
| | | | | | | |

| C. S | C. Settings for Fuel Injection Pump with Fitted Governor -33- | | | | | | | | | | |
|--------------------------------------|---|--------------------------------------|---------------------------------|---|--|--|--|--|--|--|--|
| (2b) f | ull-load stop lemp 40°C (104°F) | Note | @ : | uel delivery haracteristics | Output and speed | | | | | | |
| rev/min | cm³/1000 strokes | changed to) rev/min 3 | rev/min | cm#1000 strokes 5 | PS /U/min. | | | | | | |
| F6L9 | 12 W - PES 6 | A 75 D 410/3 R | 1197 | ,1326 (F-powe | er output) | | | | | | |
| 1400 1400 1325 1325 1300 | 56,5-58,5 53,5-55,5 55,5-57,5 53,5-55,5 53,0-55,0 | 1420 1340 1340 | 800 800 800 800 800 | 48,5-51,5 50,5-53,5 48,5-51,5 | 69,2 kW (94PS) / n = 2800 70,7 kW (96PS) / n = 2650 67,7 kW (92PS) / n = 2650 | | | | | | |
| 1250 1250 1250 1250 1250 | 55,5-57,5 51,5-53,5 48,5-50,5 46,5-48,5 43,0-45,0 | 1270 1270 1270 | 800 800 800 800 775 | 47,5-50,5 44,5-47,5 42,5-45,5 | 63,3 kW (86PS) / n = 2500 58,9 kW (80PS) / n = 2500 56,0 kW (76PS) / n = 2500 | | | | | | |
| 1200 1150 1150 1150 | 46,5-48,5 53,5-55,5 52,0-53,0 50,5-52,5 | 1170 | 800 775 775 775 | 51,5-54,5 52,0-54,0 | 64,8 kW (88PS) / n = 2300 63,0 kW (/ n = 2300 | | | | | | |
| 1150 1150 1150 1150 1150 | 49,0-51,0 47,0-49,0 46,5-48,5 43,5-45,5 42,5-44,5 | 1170 1170 1170 1170 1170 | 775 775 775 775 775 | 46,0-49,0 43,0-46,0 | 55,0 kW / n = 2300 | | | | | | |
| 1100 1075 1075 1075 1000 | 43,5-45,5 51,5-53,5 49,5-51,5 45,5-47,5 51,0-53,0 | 1120 1090 1090 1090 1090 | 775 775 775 775 775 | | 48,6 kW (66PS) / n = 2200 60,4 kW (82PS) / n = 2150 57,4 kW (78PS) / n = 2150 51,5 kW (70PS) / n = 2150 57,4 kW (78PS) / n = 2000 | | | | | | |
| 1000 1000 900 900 900 | 49,0-51,0 45,5-47,5 50,5-52,5 48,5-50,5 45,5-47,5 | 1015 1015 910 910 920 | 775 775 775 775 775 | 48,5-51,5 44,5-47,5 50,5-53,5 48,0-51,0 45,5-48,5 | 54,5 kW (74PS) / n = 2000 49,3 kW (67PS) / n = 2000 52,3 kW (71PS) / n = 1800 50,0 kW (68PS) / n = 1800 47,0 kW (/ n = 1800 | | | | | | |
| 900 900 750 750 750 | 45,0-47,0 42,0-44,0 50,5-52,5 45,5-47,5 44,5-46,5 | 910 920 760 760 760 | 775 775 - - - | 44,5-47,5 41,0-44,0 - - - | 45,6 kW (62PS) / n = 1800 42,5 kW / n = 1800 44,2 kW (60PS) / n = 1500 39,7 kW (54PS) / n = 1500 38,3 kW (52PS) / n = 1500 | | | | | | |
| | | | | Test | toil-ISO 4113 | | | | | | |

| 2b Full-load stop Test oil temp 40°C (104°F) | | Rotational- apeed limitat | @ ; | uel delivery haracteristics | Output and speedPS /U/min. | | | |
|---|------------------|------------------------------|-------------|--------------------------------|----------------------------|---|--|--|
| rev/min | cm³r1000 strokes | changed to) rev/min | rev/min | cm ³ /1000 strokes | P5 /U/min. | | | |
| <u> </u> | | 3 | | | | — | | |

| | Test on t | emp 40°C (104°F) | Note Speed limital | 10" | aracteristics | Output and speed PS /U/min. |
|--------------------------------------|-----------|---|--------------------------------------|--------------|-----------------------------------|--|
| | rev/min | cm³r1000 strokes | changed to) rev/min 3 | rev/min 4 | cm ³ 1000 strokes 5 | 3 /0/111111. |
| | F6L91 | | 75 D 410/3 RS | 1197,1 | 326 ICXN | power output (10% above rated output) |
| 1150 1150 1075 1075 1000 | 5 | 51,5-53,5 46,5-48,5 50,5-52,5 46,5-48,5 50,0-52,0 | 1170 1170 1090 1090 1015 | - | - - - - | 57,4 kW (78 PS) / n = 2300 50,0 kW (68 PS) / n = 2300 54,5 kW (74 PS) / n = 2150 48,6 kW (66 PS) / n = 2150 51,5 kW (70 PS) / n = 2000 |
| 1000 900 900 750 • 750 |)) | 46,5-48,5 49,5-51,5 45,5-47,5 49,5-51,5 44,5-46,5 | 1015 910 910 760 760 | | - - - | 47,1 kW (64 PS) / n = 2000 47,1 kW (64 PS) / n = 1800 42,7 kW (58 PS) / n = 1800 39,7 kW (54 PS) / n = 1500 35,3 kW (48 PS) / n = 1500 |
| | | | | | | |
| | | | | | | |
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| | | | | | | |

Test Specifications Fuel Injection Pumps 1 and Governors

WPP 001/4 IHC 9,4a

2. Edition

PES 8 P 100 A 921/5 RS 286 RQV 325-1250 PA 445 KR

supersedes

company:

5.83 IHC

1-8-4-2-7-3-6-5 je 45° $\pm 0.5^{\circ}$ ($\pm 0.75^{\circ}$)

engine:

DVT 573 B

Values only apply to test nozzle-and-holder assembly 1 688 901 017

Komb.-Nr.

and fuel-injection test tubing 9 681 230 713

0 402 058 045

Suction-gallery pressure 2,8 bar
All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

mm (from BDC)

| | | (2,55-2,85) | | | | |
|--------------------------|----------------------------------|--|---|----------------------------------|--|--|
| Rotational speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
| 1250 | 9,6-9,7 | 10,9-11,1 | 0,4 | | | |
| 325 | 5,0-5,1 | 1,7-2,3 | 0,6 | | | |
| | | | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rated : | speed | | Intermediate | rated sp | eed | Lower rated | spaed | • | Sliding s | leeve travel |
|--|--|-----------------------------------|---------------------------------------|----------|-------------------------------|--|------------|--------------------|-----------|--------------|
| Degree of deflection of control lever | rev/min Control rod travel mm | Control rod travel mm rev/min 28 | Degree of deflection of control lever | rev/min | Control rod travel mm 4 | Degree of deflection of control lever | rev/min | Control rod travel | rev/min | mm (1) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| ca.60 | 8,6 4.0 1640 | 1290-1300 1375-1405 0 - 1,0 | - | - | - | ca.11 | 100 325 | 6,2-7,5 5,5-6,2 | | |
| | | o | | | | 390-450 | 470-5 | 30 | | |
| | | | | | | 39 | | | | |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) | | Rotational-speed 20 limitation intermediate speed | Fuel deliv | very characteristics (5a) | Starting Idle switchir | ,) | Torque- travel | Control roo | |
|---|---|---|--------------------------|--|------------------------------|------------------------|-------------------|--------------------------------|--|
| rev/min | cm ³ /1000 strokes | rev/min 4a | rev/min | ev/min cm³/1000 strokes rev/min cm³/1000 strok | | cm³/1000 strokes | rev/min | travel min mm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| LDA 1250 | 0,8 bar 109,0-111,0 (107,0-113,0) | 1290-1300* | LDA 900 LDA 800 | 0,8 bar 115,0-121,0 (113,0-123,0) 0 bar 73,0-81,0 (71,0-83,0) | | min.170,0 17,0-23,0 | 900 | 9,5+0,1 10,0+0,1 9,8+0,1 | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

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Test Specifications Fuel Injection Pumps (A) and Governors

40

VDT-WPP 001/4

7. Edition

En

PES 4 A 85 D 420 LS 2459 EP/RSV 375-1100 A 2 B 649 DR

supersedes 16.9.70,17.2.71 29.4.71 compar@ase 45.2.73

engiA301BD

15.2.72 20.7.72

Test with case overflow valve and regulator in accordance with special setting.

24.11.72

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

mm (from BDC)

| Rotational speed rev/min 1 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ⁹ / 100 strokes 4 | Control rod travel mm | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|-------------------------------------|-------------------------|--|---|-----------------------------|--|--|
| 1100 | 11,5 | <i>2</i> ,3-7,4 | 0,3 | | | |
| 375 | 7,2 | 1,52-2,12 | | | | |
| | | | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| 1 Uppe | Upper rated speed rev/min | | | ediate rate | d speed | (4) | Lowe | r rated speed | (3) To | rque control |
|--|-----------------------------|--|------|-------------|---------|--|-------------------|--------------------------------|-------------|-----------------------------|
| Degree of deflection of control lever | Control rod travel mm | Control rod travel mm rev/min 3 | 4 | 5 | 6 | Control- lever deflection in degrees 7 | rev/min | Control rod travel mm | rev/min | Control rod travel mm |
| ca.43 | 1140 1150 1160 | 11,2-11,8 10,4-10,8 6,0- 7,4 | with | | xiliar | ca.22 | 375 150 375 | 7,2 19 - 21 7,0-7,4 | 1160 900 | 0 |
| (28) | 1220 1300 | 2,2-4,4 0,3-1 | | | | | 600 300 480 | 0 - 1 10,7-12,1 1,6- 4,4 | 500 | 0,4-0,7 |

The numbers denote the sequence of the tests

C. Settings for Fuel Injection Pump with Fitted Governor

| 9 | بالاالمالية بالاالمالية المالية | 6 Rotational- speed limitat | | uel delivery naracteristics | Starting | luel delivery 5 | 4a Idle stop | | |
|------------------------|---|--------------------------------|------------|--------------------------------|----------|------------------|--------------|-----------------------------|--|
| Test oil te rev/min | emp. 40°C (104°F) cm3/1000 strokes 2 | Note changed to) rev/min 3 | rev/min | cm³/1000 strokes | rev/min | cm³ 1000 strokes | rev/min | Control rod travel mm | |
| 1100 | 72,5-74,5 (71,5-75,5) | 1140-1155* (1135-1160) | 750 650 | 74,5-78,5 max. 77,5 | 100 | 124,0- 134,0 | 075 | 45.0 | |
| | | | 1200 | 4,5-10,5 | | | 375 | 15,2- 21,2 | |

Checking values in brackets

8.74

BOSCH

Geschaftsbereich KH. Kundendienst. Kfz-Ausrustung. C. 1980 by Robert Bosch GmbH. Postfach 50. D-7000 Stuttgart 1. Printed in the Federal Republic of German, Imprime en Republique Federale d. Allemagne par Robert Bosch GmbH.

^{* 1} mm less control rod travel than col. 2

Test Specifications Fuel Injection Pumps (A) and Governors

40

VDT-WPP 001/4

6. Edition

En

PES 6 P 100 A 720 RS 1010

EP/RSV 400-1050 P2/370 D

supersedes 12.74 (4)

company

John Deere

engine

6531 A

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke 2.4 + 0.1

mm (from BDC)

| Rotational speed | Control rod travel | Fuel delivery | Difference | Control rod travel | Fuel delivery | Spring pre-tensioning (torque-control valve) |
|------------------|-----------------------|-----------------|-------------|-----------------------|------------------------------|--|
| rev/min | mm (2) | cm3/100 strokes | 100 strokes | mm | cm ⁹ /100 strokes | mm |
| 1 | 2 | 3 | 4 | 2 | 3 | 6 |
| 1050 | 12,8 | 14,8-15,0 | 0,3 | | | |
| 400 | 6,7 | 1,9-2,5 | 0,3 | | | |
| | | | | | | |
| | | | | | | |
| | | 1 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Degree of deflection of control lever | r rated speed Control rod travei mm | rev/min Control rod travel mm rev/min 3 | Intermed | diate rated | speed | Control- lever deflection in degrees 7 | Lowe rev/min 8 | rated speed Control rod travel mm | 3 To | rque control Control rod travel mm |
|--|--|---|----------------|---------------|--------|--|---------------------------------|---|--------------------|---|
| ca.43 | 1050 1100 1150 1220 1260 | 15,6-16,4 6,2-9,6 3,8-5,2 0,3-2,6 0,3-1,5 | witho sprin | out au) Ig | ciliar | ca.19 y | 400 200 750 350 600 | 7,2 19 - 21 0 -1,5 11,0-14,0 1,4- 4,2 | 1050 750 500 | 0 0,8-1,0 0,8-1,0 |

The numbers denote the sequence of the tests

C. Settings for Fuel Injection Pump with Fitted Governor

| | ill-load stop | Rotational- speed limital Sa Fuel delivery characteristics | | | Starting Idle | fuel delivery 5 | 4a Idle stop | |
|-------------|--|---|-----------------------|---|---------------|-------------------------------|--------------|-----------------------------|
| rev/min | emp 40°C (104°F) cm ³ /1000 strokes 2 | Note changed to) rev/min 3 | rev/min 4 | cm³/1000 strokes 5 | rev/min | cm ² /1000 strokes | rev/min | Control rod travel mm |
| 0,8 1050 | bar 148,0-150,0 (146,0-152,0) | 1085-1095 (1080-1100) | 750 XX 0 550 | 0,8 164,5-167,5 (163,0-169,0) bar 108,0-116,0 | 100 | 160,0-190,0 19,0-25,0 | | |

Checking values in brackets

1 mm less control rod travel than col. 2

8.75

BOSCH

Geschaftsbereich KH. Kundendienst. Kfz-Ausrustung. c. 1980 by Robert Bosch GmbH. Postfach 50-0-7000 Stuttgart t. Printed in the Federal Republic of Germany Imprime en Republique Federale d'Allemagne par Robert Bosch GmbH.

Test Specifications Fuel Injection Pumps (A) and Governors

40

VDT-WPP 001/4

7. Edition

En

PES 4 A 85 C 420 LS 2263 EP/RSV 375-1100 A 2 B 579 DR

supersedes 16.9./0,17.2./1 Case 29.4.71

Test with case overflow valve and regulator in accordance with special setting.

engine 15.2.72 A301 BD 24.11.72

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

mm (from BDC)

| Rotational Control rod speed travel | | Fuel delivery | Difference | Control rod travel | Fuel delivery | Spring pre-tensioning (torque-control valve) |
|-------------------------------------|---------|----------------------------|---------------------------------------|--------------------|------------------------------|--|
| rev/min | mm 2 | cm³/100 strokes | cm ³ / 100 strokes 4 | mm 2 | cm ⁹ /100 strokes | mm 6 |
| 1000 | 9 | 4,15 - 4,55 | 0,4 | <u> </u> | | |
| | 6 12 | 1,15 - 1,95 7,25 - 8,05 | | | | |
| 200 | 6 | 0,95 - 1,75 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| 1 Uppe | r rated speed | | Interme | diate rated | speed | (4) | | rated speed | 3 Torque control | | |
|----------------------|-----------------------|-----------------------|----------------|-------------|----------|--------------------------|---------|-----------------------|------------------|-----------------------|--|
| Degree of deflection | Control rod travel | Control rod travel | | | Ì | Control | | Control rud travel | | Control rod travel | |
| of control lever | mm | mm rev/min | | | | deflection in degrees | rev/min | mm | rev/min | mm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| ca.43 | 1120 | 11,4 | | | | ca.22 | 375 | 7,2 | | | |
| | 1160 1210 | 7,4 2,2 | witho sprin | ut aux | iliar | y | 150 | 19 - 21 | 1100 | 0 | |
| İ | 16.10 | | j Japritii | 9 | | | 375 | 6,9-7,5 | 900 | 0,3-0,5 | |
| | 1140 | 11,2-11,8 4,5- 5,8 | with | auxili | arv | | 450 | 3,6-5,2 | 500 | 0 4 0 7 | |
| 2a | 1200 1300 | 4,5-5,8 0,3-1 | sprin | | . | | 600 | 0-1 | 500 | 0,4-0,7 | |

The numbers denote the sequence of the tests

C. Settings for Fuel Injection Pump with Fitted Governor

| 9 | ill-load stop | 6 Rotational- speed limitat | 38 Fu | iel delivery aracteristics | Starting tidle | uel delivery 5 | 4a Idle stop | |
|---------|------------------------------------|--------------------------------|------------|-------------------------------|----------------|-----------------------------------|--------------|-----------------------------|
| rev/min | cm ² /1000 strokes 2 | Note changed to) rev/min 3 | rev/min | cm³/1000 strokes 5 | rev/min | cm ³ 1000 strokes 7 | rev/min | Control rod travel mm |
| 1100 | 73,5 - 75,5 | 1140-1155* | 750 650 | 76,5 - 79,5 max. 78,0 | 100 | 124,0 - 134,0 | | |
| | | | 1200 | 6,5 -14,5 | | | 375 | 15,5- 19,5 |

Checking values in brackets

8.74

BOSCH

Geschaftsbereich KH. Kundendienst. Kf2-Ausrustung. 1980 by Robert Bosch GmbH. Postfach 50: 0-7000 Stuttgart 1. Printed in the Federal Republic of German, Imprime en Republique Federale d'Atlemagne par Robert Bosch GmbH.

^{* 1} mm less control rod travel than col. 2

Test Specifications Fuel Injection Pumps (A) and Governors

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VDT-WPP 001/4 IHC 2,29

Er

PES 4 M 65 A 420 LS 35 X EP/RSV 250-950 M1A 103D, 105D supersedes 13.4.62 LS 35 W -1000 M1A 103D, 105D company IHC LS 35 T LS 35 S DD 132

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

1,7 + 0,1

mm (from BDC)

| Control rod travel mm 2 | Fuel delivery cm ² /100 strokes 3 | Difference cm³/ 100 strokes | Control rod travel mm 2 | Fuel delivery cm ⁹ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|-------------------------------|--|--|---|---|---|
| 12 | 3,2-3,7 | 0,3 | | | |
| 9 18 9 | 1,5-2,3 6,7-7,5 0,6-1,3 | | | | |
| | travel mm 2 2 12 9 18 | travel mm 2 cm³/100 strokes 3 12 3,2-3,7 9 1,5-2,3 6,7-7,5 | travel mm 2 cm³/100 strokes 3 12 3,2-3,7 0,3 9 1,5-2,3 18 6,7-7,5 | travel | travel mm 2 cm³/100 strokes 3 cm³/ 100 strokes 4 cm³/ 100 strokes 2 mm 2 cm³/100 strokes 3 cm³/ 100 strokes 3 cm³/ 100 strokes 3 cm³/ 100 strokes 4 cm²/ 100 strokes 3 cm³/ 100 strokes 3 cm³/ 100 strokes 4 cm³/ 100 strokes 3 cm³/ 100 strokes 4 cm²/ 100 strokes 5 cm²/ 100 strokes 6 cm²/ 100 strokes 7 cm²/ 100 strokes 8 cm²/ 100 strokes 9 cm²/ 100 strokes 1 cm²/ 100 strokes 1 cm²/ 100 strokes 1 cm²/ 100 strokes 2 cm²/ 100 strokes 2 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 3 cm²/ 100 strokes 1 cm²/ 100 strokes 1 cm²/ 100 strokes 1 cm²/ 100 strokes 2 cm²/ 100 strokes 3 cm²/ 100 strokes 4 cm²/ 100 strokes 5 cm²/ 100 strokes |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

EP/RSV 250-950 M 1 A 105 D

| Degree of deflection of control lever | r rated speed Control rod travel mm | Trev/min Control rod travel mm rev/min 3 | Intermed | diate rated | speed | Control- lever deflection in degrees 7 | Lowe rev/min 8 | Control rod travel mm | 3 To | rque control Control rod travel mm |
|---------------------------------------|--|--|----------------|------------------------------------|-------|--|--------------------------|--|-------------------|---|
| ca.58 | 950 1000 1050 | 16 12,4 8,2 | witho sprin | ut aux | iliar | ca.31 | 250 100 | 9 19-19,5 | 930 700 500 | 0 0,3-0,5 0,7-0,9 |
| 29 | 1020 1100 1150 1250 | 9,4-12 4,2-6,8 1,4-4,8 | with | spring with auxiliary spring | | | 250 400 500 750 | 8,7-9,3 5,5-7,4 1,8-5,6 0 - 1 | 300 | |

The numbers denote the sequence of the tests

C. Settings for Fuel Injection Pump with Fitted Governor

| W | ill-toad stop | Rotational- speed limitat (3a) Fuel delivery characteristics | | | Starting Idle | fuel delivery 5 | 49 Id | le stop |
|--------------|--|---|--------------|------------------------------------|---------------|------------------|--------------|----------------------------|
| rev/min 1 | emp. 40°C (104°F) cm²/1000 strokes 2 | Note changed to) rev/min 3 | rev/min 4 | cm ³ /1000 strokes 5 | rev/min | cm³/1000 strokes | rev/min 8 | Control ro travel mm |
| 930 | 39,5-41,5 | 960 | 500 700 | 42,0-45,0 40,0-42,0 | | | | |
| | | | | | | | | |

Checking values in brackets

* 1 mm less control rod travel than cot 2

12.64

BOSCH

Geschaftsbereich KH. Kundendienst. Kfz. Ausrustung. 1980 by Robert Bosch GmbH. Postfach 50, D-7000 Stuttgart 1. Printed in the Federal Republic of Germany Imprime en République Federale d'Allemagne par Robert Bosch GmbH.

| Upper rated s | peed | | Intermediate | rated spe | eed | Lower rated | speed | | Torou | e-control |
|--|---|---|--|-----------|-------------------------------|--|--|--|-------|-------------------------|
| Degree of deflection of control lever | | travel mm | Degree of deflection of control lever | rev/min | Control rod travel mm 4 | Degree of deflection of control lever | rev/min | Control rod travel mm 3 | trave | |
| ca.58 | 950 1000 1050 1020 1100 1150 1250 | 16 12,4 8 9 -11,6 4 - 6,5 1 - 4,4 0 - 1 | without spring with au spring | | iary | ca.31 | 250 100 250 400 500 700 | 9 19-19,5 8,7-9,3 5,5-7,3 1,8-5,6 0 - 1 | 930 | 0 0,6-0,8 1,0-1,2 |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-roc Test oil ten | stop | Rotational-speed (2b) limitation intermediate speed | Fuel deln high idle s | very characteristics (5a) upeed (5b) | ildle | fuel delivery 6 ng point | Torque- travel | Control rod |
|---|-------------------------------|---|--------------------------|--------------------------------------|---------|-----------------------------|-------------------|--------------|
| rev/min | cm ³ /1000 strokes | rev/min (4a) | rev/min | cm ³ /1000 strakes | rev/min | cm3/1000 strokes | rev/min | travel mm |
| [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| X 930 | 32,0-34,0 | 960 | 500 700 | 36,5-39,5 34,5-36,5 | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

B. Governor Settings

EP/RSV 250-1000 M 1 A 103 D

| Upper rated | speed | | Intermediate | rated spe | ed | Lower rated | speed | | Toro | Torque-contro | |
|----------------------|--|--|--|-----------|------------------------|----------------------|--|---|---------|-------------------------|--|
| Degree of deflection | rev/min ¡Control | Control rod (1a) | Degree of deflection | ŧ | Control rod (travel | Degree of deflection | 1 | Control rod [travel | trav | | |
| of control lever | rod travel | mm rev/min (2a) | of control lever | rev/min | mm (4) | of control lever | rev/min | mm (3) | rev/min | mm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 88 | 9 | 10 | 11 | |
| ca.62 | 1000 1050 1100 1080 1150 1200 1300 | 16 12,6 8,4 8,5-11,2 4,2-6,8 1,2-4,8 0 - 1 | without spring with au spring | | | ca.32 | 250 100 250 400 500 720 | 9 19-19,5 8,7- 9,3 5,6- 7,4 1,8- 5,6 0 - 1 | 500 | 0 0,3-0,5 1,0-1,2 | |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load di Control-roo Test oil terr | | Rotational-speed (2b) Ilmitation Intermediate speed (4a) | Fuel deln high idle s | very characteristics 5a speed 5b | | fuel delivery 6 | Torque- travel | Control rod |
|--|-------------------------------|--|--------------------------|----------------------------------|---------|-------------------------------|-------------------|--------------|
| rev/min | cm ³ /1000 strokes | rev/min | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| \$ 980 | 32,0-34,0 | 1010 | 500 800 | 36,5-39,5 34,5-36,5 | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

B. Governor Settings

| Upper rated | speed | | | Intermediate | rated spe | ed | Lower rated | speed | | | Torque-control | |
|--|--|---|---------------|--|-----------|-------------------------------|---------------------------------------|--|--------------------------------|--------|------------------------|-------------------------|
| Degree of deflection of control lever | rev/miri Control rod travel mm | Control rod travel mm rev/min 3 | (1) | Degree of deflection of control lever | rev/min | Control rod travel mm (| Degree of deflection of control lever | rev/min 8 | Control (travel mm 9 | 3 3 | ravel rev/min 10 | mm |
| ca.62 | 1000 1050 1100 1080 1150 1200 1300 | 16 12,0 8,6 8,5-11 4,2-6,0 1,2-4,0 | 4 8 | without spring with au spring | | liary ry | ca.32 | 250 100 250 400 500 700 | 8,7- 5,6- | | | 0 0,3-0,5 0,7-0,9 |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-roo Test oil ten | | limitation intermediate speed | Fuel deliv character high idle s | ristics | Starting Idle switchir | fuel delivery 6 | Torque- travel | Control cod |
|---|-------------------------------|-------------------------------|--|-------------------------------|------------------------------|------------------|-------------------|-------------|
| rev/min | cm ³ /1000 strokes | rev/min (4a) | rev/min | cm ³ /1000 strokes | ten/wiu | cm³/1000 strokes | rev/min | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| T 980 | 39,5-41,5 | 1010 | 500 800 | 42,0-45,0 40,0-42,0 | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

D. Adjustment Test for Manifold Pressure Compensator

rev/min decreasing pressure ~ in bar gauge pressure

| Pump/governor | Setting Gauge pressure = bar | Measurement Gauge pressure = bar | diminution Control rod travel- difference mm |
|---------------|-------------------------------|-----------------------------------|---|
| | | | , |
| | | | |
| | | · | |
| | | | |

En'

Test Specifications Fuel Injection Pumps (1A) and Governors

WPP 001/4

1. Edition

EP/RSV 400-1100 A2B765DL PES 6 A 100 D 410 RS3025Z

RS 3025 EP/RSV 400-1100 A2B766DL EP/RSV 400-1100 A7B767 L RS 3025

supersede's

engine

Test-pressure line 6 x 2 x 600

Inlet pressure 1.5 bar

John Deere company 6404 A

Manifold-pressure compensator (LDA) adjustment page 3! All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke 2,0+0,1(+0,15)

mm (from BDC)

Port closing mark 14 ° after port closing.

| Rotational speed | Control rod | Fuel delivery | Difference | Control rod travel | Fuel delivery | Spring pre-tensioning (torque-control valve) |
|------------------|-------------|-----------------|---------------------|-----------------------|-----------------|--|
| rev/min | mm 2 | cm3/100 strokes | cm³/ 100 strokes | mm | cm³/100 strokes | mm 6 |
| 1 | 2 | 3 | 4 | 2 | 3 | - |
| 1000 | 9 | 7,6 - 8,3 | 0,5 | | | _ |
| | 6 | 3,2 - 4,2 | | | | |
| | 12 | 12,2 -13,5 | | | | |
| 200 | 9 | 4,0 - 5,2 | | | | |
| | | | 1 | | | |

Adjust the fuel delivery from each outlet according to the values in [

400-1100 A2B765DL mit 3025Z

B. Governor Settings

| 11 7 7 | r rated speed Control rod travel mm | Control rod travel mm rev/mi/i | Intermo | ediale r | aled speed | Control lever deflection in degrees 7 | Lowe rev/min 8 | r rated speed Control rod travel mm | 1(3) | rque control Control rod travel Inm |
|------------|--|--------------------------------------|---------|----------|------------|---------------------------------------|----------------------|--|-------------|--|
| ca.43 | 1060 1145 1200 | 16,0 9,5 4,5 | with | out a | auxiliar | ca.21 y spring | | 6,3 19 - 21 6,0-6,6 | 1100 500 | 0 |
| 2 a | 1100 1200 1250 | ca.10,5 ca. 4,5 0,3-1,0 | | | | | 450 560 | 3,7-4,8 | | |

The numbers denote the sequence of the tests

C. Settings for Fuel Injection Pump with Fitted Governor

| ピツ | est oil temp 40°C (104°F) Note changed to) | | | el delivery aracteristics cm ² /1000 strokes 5 | Starting f Idle · rev/min 6 | cm ⁹ /1000 strokes | rev/min 8 9 | |
|--------|--|---------------------------|--------------------------|--|---|---------------------------------------|-------------|-----|
| | 0,8 bar 107,5-109,5 | 1140-1150* (1135-1155) | LDA 750 LDA 550 | 0,8 bar 118,5-121,5 0 bar 53,0-59,0 | 100 400 1200 | 156,0-176,0 11,5-15,5 20,5-26,5 | 400 | 6,3 |
| linrea | se by · 2,0 cm³ | !) | | | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

9.76

BOSCH

Geschaftsbereich KH. Kundendienst. Kfz. Ausrustung. ... 1980 by Robert Bosch GmbH. Postfach 50, D. 7000 Stuttgart 1. Printed in the Federal Republic of Germany imprime en Republique Federale d. Allemagne par Robert Bosch GmbH.

B. Governor Settings

| Degree of | rated speed Control rod travel mm | | Intermed | Intermediate rated speed 4 5 6 | | | | rated speed Control rod travel mm | | rque control Control rod travel mm |
|-----------|--|-------------------------------|----------|--------------------------------|-------|-------------------|-------------------|--|-------------|---|
| ca.43 | 1060 1145 1200 | 16,0 9,3 4,3 | with | out au | xilia | ca.21 ry sprin | 400 200 400 | 19 - 21 6,0-6,6 | 1100 500 | 0 1,7-1,9 |
| 29 | 1100 1200 1270 | ca.10,4 ca. 4,3 0,3-1,0 | with | auxil | liary | spring | 500 580 | 0,4-3,2 0 - 1 | | |

C. Settings for Fuel Injection Pump with Fitted Governor

| (2b) Fu | ill-load stop | 6 Rotational- speed limitat 3 Fuel delivery characteristics | | | Starting 1 | uel delivery (5) | 4a tdle stop | | |
|-------------|---|---|------------|-------------------------------|--------------------|---------------------------------------|--------------|----------------------------------|--|
| | est oil temp. 40°C (104°F) Note: changed to) | | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes 7 | rev/min 8 | Control rod travel mm 9 | |
| LDA 1100 | 0,8 bar 107,0-109,0 | 1140-1150* (1135-1155) | LDA 500 | 0,8 bar 122,5-125,5 | 100 400 1200 | 156,0-176,0 11,5-15,5 18,5-28,5 | 400 | 6,3 | |
| (inre | ase by 2,0 cm | ₹!) | | | | | <u> </u> | | |

Checking values in brackets

Testoil-ISO 4113

* 1 mm less control rod travel than col. 2

B. Governor Settings

| Degree of deflection of control lever | r rated speed Control rod travel mm | | Intermed | diate rated | speed | Control- lever deflection in degrees | Lower | Control rod travel mm | 11 3 / | rque control Control rod travel mm |
|---------------------------------------|--|----------------------------------|----------|-------------|----------|---|-------------------|-----------------------------|--------|---|
| ca.72 | 1070 1100 1150 | 16,0 11,6 4,2 | | out aux | <u> </u> | ca.30 y sprin | 400 150 400 | 6,3 19 - 21 | | |
| 29 | 1080 1120 1180 | ca. 10,6 7,0- 9,6 0,3- 1,0 | with | auxil | iary s | pring | 450 450 500 | 6,0-6,6 1,7-3,7 0 - 1 | | |

C. Settings for Fuel Injection Pump with Fitted Governor

| (2b) Fu | II-load stop | Rotational- speed limitat. Fuel delivery characteristics | | | Starting f | uel delivery 5 | | Idle stop | |
|---------|---------------------------------------|--|---------|-------------------------------|--------------------|---------------------------------------|---|--------------|--|
| | emp. 40°C (104°F) cm³/1000 strokes | Note: chariged to) rev/min 3 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes 7 | | travel mm | |
| 1080 | 112.0-114,0 | 1110-1120* (1105-1125) | | | 100 400 1150 | 156,0-176,0 11,5-15,5 11,5-21,5 | 1 | 6,3 | |
| (inr | ease by 2,0 cm³) | | | | | | | | |

Checking values in brackets En

* 1 mm less control rod travel than col. 2

D. Adjustment Test for Manifold Pressure Compensator

Testatn =

rev/min decreasing pressure - in bar gauge pressure

| 1 | 3 |
|----|---------------|
| • | - |
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| · | S |
| 1 | 38 |
| 1. | W |
| 11 | _ |
| | |

| Pump/governor | Setting | Measurement | diminution . Control rod travel difference |
|--|----------------------|----------------------|--|
| | Gauge pressure = bar | Gauge pressure = bar | mm (1) . |
| 3025Z with 765DL | 0,62 | 0,11 | -0,1-0,2 -3,0-3,3 |
| 3025 with 766DL | 0,55 | 0,11 | -0,1-0,2 -2,6-2,8 |
| 3025 with 767 L | without | LDA | |
| Switching point (hydr. measurement) | max. 0,76 | mind. 0,48 | 10 - 11 mm RW 19 - 21 mm RW |

Notes

(1) when n =

rev/min and gauge pressure =

bar (= maximum full-load control rod travel)

Preliminary adjustment, dimension H = 21.8 mm

40

WPP 001/4 VOL 10,0 f

4. Edition

_En

PE 6 P 110 A 320 RS 273, Z RQV 250-1200 PA 238/2R

Port-closing test with/without ROBO diaphragm

supersedes 8.77 VOLVO

engine: TD 100 B

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2,60-2,70 (2.55-2.75) mm (from BDC)

| | Control rod travel | Fuel delivery cm ³ /100 strokes | Difference cm ³ / 100 strokes | Control rod travel mm | Fuel delivery cm ³ /190 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|------------------|-----------------------|--|--|-----------------------------|--|--|
| 1000 | 12 | 18,2 - 18,9 | 0,6 | | | 2,5 [±] 0,1** |
| 600 | 15 | 27,5 - 29,4 | | | | (max. 2,2-2,9) |
| 200 ** In the | 9 ase of | 7,9 - 9,1 greater dispers | on alter | the deli | very-valve spri | ng pre-tension |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

273 with 1200

| Upper in Degree deflects of continues to the lever | of | rev/min Control rod trave | Control rod travel mm rev/min | • | Intermediate Degree of deflection of control lever | rated sperrev/min | Control rod travel mm | Lower rated Degree of deflection of control lever 7 | rev/min | Control rod travel | Sliding sl rev/min 10 | mm |
|--|----|---------------------------------|--|----|--|-------------------|-----------------------------|---|---------------------------------|---|-----------------------------|---------------------------|
| ca. | | 1560 | 15,0-18 0 15,0-18 8,2-13 0 - 7 | ,2 | | | | ca.13 | 100 200 300 400 510 | 8,8-11,0 7,1- 9,9 3,8- 6,8 0 - 3,6 | 600 1290 | 1,4-2,0 4,4-4,8 8,2 |
| | | 1510 | 0 | | | | | 30 | | | | |

Torque control travel & =

mп

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-roc | | Rotational-speed 20 timitation intermediate speed | Fuel deliv high idle s | | switchin | ig point I | travel | Control (5) Control rot |
|-----------------------------|------------------------------|---|---------------------------|------------------------------------|--------------|------------------------------------|--------------|-------------------------|
| | — | rev/min 49 | rev/min | cm ³ /1000 strokes 5 | rev/min 6 | cm ² /1000 strokes 7 | rev/min 8 | mm 9 |
| LDA | 0,85 bar | | LDA | 0 bar | 100 | 20,5-21,0 mm RW | | |
| 700 | 158,5-161,5 (156,5-163,5) | 1230-1240* | 700 | 113,5-116,5 (115,5-118,5) di | 250 pers | 11-15 en max.2,5 | | |
| | | | | _ | | | | ./. |

Checking values in brackets

* 1 mm less control rad travel than cal. 2

| Upper | rated | speed | | | Intermediate | rated spe | ed | Lower rated | speed | 4 | Strainas | leeve travel |
|-------------------------------------|----------|---|---|----|--|-----------|-------------------------------|---|---------------------------------|--|-------------|---------------------------|
| Degree deflec of con lever | tion | rev/min Control rod travel mm 2 | Control rod trave! mm rev/min 3 | | Degree of deflection of control lever | rev/min | Control rod travel mm 4 | Degree of deflection of control lever 7 | rev/min | Control rod travel mm 3 | | mm |
| ca. | 50 45 | 1290 1560 1200 1300 1400 | 15,0-18 0 15,0-18 8,2-13 0 - 7 | ,2 | | | | ca.13 | 100 200 300 400 510 | 8,8-11,0 7,1- 9,9 3,8-6,8 0 - 3,6 | 600 1290 | 1,4-2,0 4,4-4,8 8,2 |
| | | 1510 | U | _ | | | | 39 | | | | |

Torque control travel a =

mm

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-roo Test oil terr | | Rotational-speed (2b) limitation intermediate speed (ev/min | character high idle s | ristics | ldle switchir | fuel delivery 6 | Torque- travel | Control cod travel |
|--|--|--|--------------------------|---------------------------------------|------------------|---|-------------------|-----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| LDA 700 | 0,85 bar 135,5-138,5 (133,5-140,5) | 1230-1240* | LDA 700 | 0 bar 113,5-116,5 (111,5-118,5) | 250 | 20,5-21,0 mm RW 11-15 sion max.2,5 | r* | |

Checking values in brackets

D. Adjustment Test for Manifold Pressure Compensator

Test at n =

rev/min decreasing pressure – in bar gauge pressure

| Pump/governor | Setting | Measurement Gauge pressure = bar | diminution Control rod :ravel- difference mm |
|-----------------|----------------------------------|-----------------------------------|---|
| 273 with 1200 | Gauge pressure = bar 0,52 - 0,54 | 0,11 - 0,19 | ~ |
| 273 Z with 1200 | 0,40 - 0,42 | 0,11 - 0,19 | |
| | | | |
| | | | |
| | | | |
| | | | |

^{* 1} mm less control rod travel than col. 2

Test Specifications Fuel Injection Pumps ① and Governors

WPP 001/4 ALO 11,0 a 1. Edition

PES 6 P 110 A 320 RS 211 0 402 046 083 RQV 300 1000 PA 217 KR

company 1100

1 - 5 - 3 - 6 - 2 - 4

Calibrating nozzle-and-holder assembly 0 681 343 009 Test-pressure line 9 681 230 704 company 11000 engine

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2,8+0,1

mm (from BDC)

| Rotational speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|--------------------------|----------------------------------|---|---|----------------------------------|--|--|
| 1000 | 12 | 160-168 | | | | |
| 600 | 9 12 15 | 85- 91 152-161 215-233 | | | | |
| 200 | . 9 | 68- 81 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| | Upper rated s | peed | | Intermediat | rated sp | eed | Lower rated | speed | • | Sliding a | leeve travel |
|---|---------------|--------------------|---------------------|----------------------|----------|-----------------------|----------------------|---------------------------------|--|-----------|--------------|
| | deflection | rev/min Control | Control rod (travel | Degree of deflection | | Control rod travel | Degree of deflection | | Control rod travel | | 0 |
| ŀ | | rod travel mm | mm rev/min (2 | e) of control | rev/min | mm (4) | of control lever | rev/min | mrn 3 | rev/min | mm |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | \(\bar{\pi}\) | 10 | 11 |
| | 66° | | 0,7-7,8 | 5 | | | 10° | 250 300 350 400 550 | 6,4-8,0 4,8-7,0 3,0-5,2 2,2-3,8 | | |
| | | | | | l | | 3a | | | | |

Torque control travel a =

Testoil-ISO 4113

mn

C. Settings for Fuei Injection Pump with Fitted Governor

| Full-load de Control-roo Test oil ten | | timitation intermediate speed | high idle s | ery characteristics (5e) | Starting Idle switchir | ng point | Torque- travel | control 5 Control rod travel |
|---|-------------------------------|-------------------------------|-------------|-------------------------------|------------------------------|-------------------------------|-------------------|-------------------------------|
| rev/min | cm ³ /1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | rev/min | cm ² /1000 strokes | rev/min | ww |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Checking values in brackets

* 1 mm less control rod travel than cel. 2

| Full-load o | | Breakaway 20 | Fuel deli | very characteristics 5a | Starting Idle | fuel delivery 6 | LCW 10 | le speed 5 |
|---------------------------|--------------------------------|--------------------|------------|----------------------------|---------------|-------------------------------|--------|------------------------|
| Control ro Test oil te | od stop imp. 40°C (104°F) 2 | intermediate speed | migh iose | speed (50) | switchin | ng point | | Control root travel |
| rev/min | cm ³ /1000 strokes | rev/min 4a | rev/min | 1 | - | cm ³ /1000 strokes | rev/mi | mm 9 |
| 1 | 2 | 3 | - | 5 | 6 | | 8 | 1 |
| AC-Nr. | 4 392 715 | | | | | | | |
| | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 392 717 | | . 00 | , | | | | |
| | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 392 719 | | | | | | | |
| | 200,0-206,0 | 1070 | 900 | 190,0-196,0 | 100 | 130,0-170,0 | 300 | 19.0-25. |
| 1050 | £00,0~200,0 | 1070 | 700 | 214,0-220,0 | | | | |
| AC-Nr | , 4 392 721 | | | | | | | |
| | 242,0-248,0 | 1070 | 900 | 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 1000 | 212,0 270,0 | | 700 | 230,0-236,0 | | | | |
| AC-Nr. | . 4 392 723 | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | • | | | | | | | , |
| | . 4 392 725 | 82C | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 800 | 239,0-245,0 | 020 | 000 | 240,0 254,0 | 100 | ,00,0,0 | | ,. |
| AC-Nr. | . 4 392 727 | | | | | 0 170 0 | | 40.0.05 |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | . 4 392 729 | | | | | | | |
| 1000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| VC-N~ | . 4 392 731 | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| | • | | | 20.,0 200,0 | | | | |
| | . 4 392 735 | 4070 | 000 | 222 0 220 0 | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 1050 | 239,0-245,0 | 1070 | 900 700 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 | 13,0 23 |
| | 4 200 727 | | | • | | | | |
| | . 4 392 737 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19-0-25 |
| 1000 | 215,0-221,0 | 1020 | 600 | 220,0-226,0 | | 100,0 170,0 | 550 | , |
| AC M | 4 202 720 | | | | | | | |
| | . 4 392 739 | 1070 | 900 | 195,0-201,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 1050 | 207,0-213,0 | 10/0 | 700 | 225,0-231,0 | | | 230 | , |
| AC AIL | . 4 392 741 | | | | | | | |
| | 213,0-219,0 | 1070 | 900 | 202,0-208,0 | 100 | 130,0-170,0 | ļ | |
| 1050 | 213,0-213,0 | 1070 | 700 | 230,0-236,0 | | , , , | | |
| ۸ <i>۲ ـ</i> ۱۱۰۰ | . 4 392 743 | | | • | | | | |
| Checking | 220,0-226,0 | 1070 | 900 | 210,0-216,0 | 100 | 1 mm less con 130,0-170,0 | | |
| IUOU | . 220,0-220,0 | 1070 | 700 | 243,0-249,0 | . •• | | | • |

Testoil-ISO 4113

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load d Control-ro | d stop | Breakaway | 20 Fuel de high ide | livery characteristics 58 | Idle | fuel delivery 6 | Low idl | e speed 5 |
|---------------------------|--|--------------|------------------------|----------------------------|------|------------------|--------------|-----------------------------|
| | np. 40°C (104°F) (2) cm ³ /1000 strokes 2 | rev/min 3 | rev/mir | | 1 | cm³/1000 strokes | rëv/min 8 | Control rod travel mm |
| | 4 392 747 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 392 749 230,0-234,0 | 1070 | | 4) | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 392 750 230,0-234,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 392 768 123,0-133,0 | 820 | 600 | 132,0-142,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 875 | 4 392 775/770 162,0-164,0 | 6 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 950 | 4 392 777 205,0-207,0 | 970 | 700 | 195,0-199,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 950 | 4 392 778 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 1,0-27,0 |
| | 4 392 779 190,0-200,0 | 1030-40 | 1000 900 | 191,0-201,0 178,0-188,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 392 781 228,0-238,0 | 1050-60 | 900 700 | 205,0-215,0 207,0-217,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 392 953 185,0-195,0 | 955~65 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 393 095 211,0-221,0 | 1060-80 | 900 700 | 210,0-220,0 238,0-248,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 393 307 210,0-216,0 | 920 | 700 | 212,0-128,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| | 4 393 431 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 1050 | 4 393 821 242,0-248,0 lues in brackets | 1070 | 900 700 | 220,0-226;0 230,0-236,0 | 100 | 130,0-170,0 | | |

. En

| Full-load (| | Breakaway | ® | Fuel del | ivery characteristics (5 | Starting | fuel delivery 6 | LOW 1 | ale | speed 5 |
|---------------------------|----------------------|-----------|----------|------------|-------------------------------|----------|-------------------------------|-------------|----------|------------------------|
| Control-ro Test oil te | mp. 40°C (104°F) (2) | | | rnign icie | speed (50) | switchir | g point | | | Control ro |
| rev/min | cm³/1000 strokes | rev/min | 49 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/m | | ww |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 4 | 9 |
| ! | 1 | 1 | 1 | • | ' | 1 | • | | ' | |
| IC-Nr. | 4 393 823 | | | | | | | | | |
| 050 | 187,0-193,0 | 1070 | | | 174,0-180,0 175,0-181,0 | 100 | 130,0-170,0 | 300 | 19 | , 0-25 , |
| C-Nr. | 4 393 825 | | | | | | | | | |
| 050 | 224,0-230,0 | 1070 | | 800 | 185,0-191 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| IC-Nr | 4 393 827 | | | | | | | | | |
| - | 200,0-206,0 | 1070 | | | 190,0-196,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| | | | | 700 | 214,0-220,0 | | | | | |
| NC-Nr. | 4 393 829 | | | | | | | | | |
| 050 | 230,0-234,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| NC-Nr. | 4 393 831 | | | | | | | | | |
| | 213,0-219,0 | 1070 | | 900 | 202,0-208,0 | 100 | 130,0-170,0 | | | |
| | | | | 700 | 230,0-236,0 | | | | | |
| NC-Nr. | 4 393 833 | | | | | | | | | |
| | 264,0 | 1060-1980 | | 900 | 280,5 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| | • | | | | • | | | | | |
| | 4 393 835 | 4070 | | 000 | 040 0 046 0 | 400 | 120 0 170 0 | 200 | 10 | 0.25 |
| 1050 | 220,0-226,0 | 1070 | | | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 | 13 | ,0-20, |
| | 4 000 007 | | | | | | | | | |
| | 4 393 837 | 4070 | | 000 | 200 0 214 0 | 100 | 130,0-170,0 | 200 | 10 | 0-25 |
| 1050 | 227,0-233,0 | 1070 | | | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 | 13 | ,0-23 |
| 10. 11. | 4 202 000 | | | | | | | | | |
| | 4 393 890 | | | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21 | 0-27 |
| 950 | 208,0-214,0 | 990 | | 750 | 170,07404,0 | 100 | 130,0-1/0,0 | J00 | <u> </u> | 3U-E/ |
| | 4 393 891 | | | | | | | | | |
| 955 | 208,0 | 965-975 | | 895 | 203,0 | | | | | |
| AC-Nr. | 4 393 961 | | | | | | | | | |
| 900 | 181,0-187,0 | 920 | | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25 |
| /C-N∽ | 4 394 001 | | | | | | | | | |
| | 218,0-224,0 | 720 | | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27 | .0-3 3. |
| | | , 20 | | | | . 50 | ,,. | | | , |
| | 4 394 017 | | | | | 4.5.5 | 400 0 400 0 | | • | 2 5- |
| 950 | 208,0-214,0 | 990 | | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21 | , U-27 |
| AC-Nr. | 4 394 020 | | | | | | | | | |
| 700 | 249,0-257,0 | 725 | | 600 | 258,0-264,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-29 |
| | alues in brackets | | | | | | * 1 mm less contr | ol rod t | rave | I than col. |
| | 4 394 062 | 020 | | 600 | 102 0-100 0 | 100 | 130,0-170,0 | პ ሀሀ | 10 | 0-25 |
| 30 0 | 113,0-119,0 | 820 | | 600 | 102,0-108,0 | 100 | 130,0-1/0,0 | 200 | נו | ,0-20 |

| ull-load delivery ontrol-rod stop | Breakaway | (20) Fuel del | ivery characteristics (5a speed (5b) | ldle | fuel delivery 6 | Low id | le speed 5 |
|--------------------------------------|-------------------|---------------|--------------------------------------|------|---|---------|------------------------|
| est oil temp. 40°C (104° | \smile_{I} | | | 1 | ng point cm ³ /1000 strokes | rev/min | Control root travel |
| ev/min cm ³ /1000 str | okes rev/min 3 | rev/min | 5 | 6 | 7 | 8 | 9 |
| C-Nr. 4 394 C | 164 | | • | ı | ľ | • | • |
| 375 161,0-16 | 55,0 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| NC-Nr. 4 394 0 | 166 | | | | | | |
| 300 125,0-13 | 81,0 820 | 600 | 134,0-140,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| NC-Nr. 4 394 (| 168 | | | | | | |
| 025 192,0-19 | 98,0 1045 | 900 | 180,0-186,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| NC-Nr. 4 394 (| 170 | | | | O | | |
| 000 200,0-20 | 06,0 1020 | 800 | 180,0-186,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | 600 | 189,0-195,0 | | | | |
| NC-Nr. 4 394 (| | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 940 185,0-19 | | | | 100 | 15050-17050 | , 300 | 13,0 20 |
| AC-Nr. 4 394 (| | 900 | 207,0-213,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 1025 230,0-23 | 36,0 1040 | 700 | 209,0-215,0 | 100 | 150,0 170,0 | , 000 | 13,0 20 |
| AC-Nr. 4 394 (|)76 | | | | | | |
| 1000 227,0-2 | 33,0 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. 4 394 (| 078 | | | | | | |
| 1000 235,0-2 | 41,0 1020 | 700 | 263,0-269,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. 4 394 (| 080 | | | | | | |
| 1000 220,0-2 | 26,0 1020 | | 209,0-215,0 | 100 | 130,0-170, | 300 | 19,0-25 |
| | | 600 | 227,0-233,0 | | | | |
| AC-Nr. 4 394 | | 0 | | 100 | 130,0-170,0 | n 300 | 25.0 |
| 910 190,0 | 930, | U | | 100 | 130,0-170, | 300 | 23,0 |
| AC-Nr. 4 394 (| | 700 | 139,0-145,0 | 100 | 130.0-170. | 0 300 | 19.0-29 |
| 900 160,0-1 | - | 700 | 139,0-140,0 | 100 | 150,0-170, | 0 300 | 7 |
| AC-Nr. 4 394 | _ | | | 100 | 130,0-170, | 0 300 | 19.0-29 |
| 600 124,0-1 | 4 | | | 100 | 130,00170, | 0 300 | 15,0 20 |
| AC-Nr. 4 394 | | 600 | 124,0-130,0 | 100 | 130,0-170, | በ 3በበ | 19.0-29 |
| 700 127,0-1 | ్రు | 000 | 144,0-130,0 | 100 | 100 90 " 17 0 9 | | , |
| AC-Nr. 4 394 | | ድስስ | 124,0-130,0 | 100 | 130,0-170, | ህ 3ሀሀ | 19 0-20 |
| 800 139,0-1 | - | 600 | 124,0-130,0 | 100 | 130,0-1/0, | 0 300 | 13,0-6 |
| AC-Nr. 4 394 | | 000 | 400 0 404 0 | 100 | 120 0-170 | U 3UU | 10 0-21 |
| 925 157,0-1 ecking values in bracke | 63,0 945 | 800 600 | | 100 | 130,0-170, *1 mm less cont | | |

ALO 11,0 a

| Fuil-load Controi-r | od stop | Breakaway | (3) F(| jel deli gh idle | ivery characteristics (5 | 7 Idle | fuel delivery 6 | Low | idle | speed 5 |
|------------------------|---------------------------------------|-----------|----------|---------------------|-------------------------------|--------|--|-------|-------|-----------------------------|
| rest oil te | mp. 40°C (104°F) (2) cm³/1000 strokes | rev/min | | v/min | cm ³ /1000 strokes | 1 | ing point cm ³ /1000 strokes | rev/n | nin I | Control ro- travel mm |
| 1 | 2 | 3 | 4 | ******** | 5 | 6 | 7 | 8 | | 9 |
| C-Nr. | 4 394 094 | 1 | | | | 1 | | | Ī | |
| | 180,0-186,0 | 1020 | 80 70 | | 154,0-160,0 142,0-148,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25,0 |
| C-Nr. | 4 394 096 | | | | | | | | | |
| 050 | 207,0-213,0 | 1070 | 90 80 | | 161,0-175,0 147,0-153,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| C-Nr. | 4 394 098 | | | | | | | | | |
| 00 | 187,0-193,0 | 920 | 70 | 0 | 162,0-168,0 | 100 | 130,0-170,0 | 300 | 27 | ,0-33, |
| IC-Nr. | 4 394 100 | | | | | | | | | |
| 000 | 200,0-206,0 | 920 | 70 | 00 | 184,0-190,0 | 100 | 130,0-170,0 | 300 | 27 | ,0-33, |
| C-Nr. | 4 394 102 | | | | | | | | | |
| 000 | 203,0-209,0 | 920 | 70 | 00 | 209,0-215,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| C-Nr. | 4 394 104 | | | | | | | | | |
| ' 50 | 185,0-191,0 | 770 | 60 | 00 | 222,0-228,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| | 4 394 106 | | | _ | | | 440 0 470 0 | 222 | | ő 05 |
| 300 | 210,0-218,0 | 820 | 60 | 00 | 223,0-229,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| | 4 394 108 | | | | 000 0 000 0 | 400 | 420 0 470 0 | 200 | 10 | 0.25 |
| 050 | 222,0-228,0 | 1075 | 90 70 | | 202,0-208,0 207,0-213,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| \C-Nr. | 4 394 110 | | | | | | | | | |
| | 240,0-246,0 | 1020 | | | 224,0-230,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| | | | 61 | 00 | 237,9-243,0 | | | | | |
| | 4 394 112 | | | | | 400 | 400 0 470 0 | 200 | 4.0 | 0 25 |
| 1050 | 245,0-251,0 | 1070 | | | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 | 300 | 19 | ,U-Z5, |
| \C-Nr. | 4 394 114 | | | | | | | | | |
| | 217,0-223,0 | 1020 | | | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19 | ,0-25, |
| | | | 61 | 00 | 219,0-225,0 | | | | | |
| | 4 394 116 | | | | | | 400 0 470 0 | 200 | | 0.00 |
| 900 | 210,0-216,0 | 920 | 71 | 00 | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 27 | , U-33, |
| | 4 394 118 | | | | | | | | | 0 |
| 1050 | 269,0-275,0 | 1070 | | | 281,0-287,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19 | , U-25 |

Checking values in brackets

En

Testoil-ISO 4113

* 1 mm less control rod travel than col. 2

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load Control-re Test oil te | | Breakaway | ② | Fuel deli high idle | very characteristics (5e speed (50) | idle | fuel delivery 6 | Low id | le speed E |
|--|-----------------------------|-----------|----------|------------------------|-------------------------------------|---------|----------------------------------|---------|--------------|
| rev/min | cm³/1000 strokes | rev/min | 4 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strottes | rev/min | travel mm |
| , | 12 | 3 | | - | 5 | | | 1 | |
| AC-Nr. | . 4 394 120 | | | | | | | 200 4 | 0 0 25 |
| 1050 | 234,0-240,0 | 1070 | | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| AC-Nr. | . 4 394 122 | | | | | | | 200 (| |
| 1050 | 262,0-268,0 | 1070 | | 900 7 0 0 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | . 4 394 124 | | | | | | | | |
| 1050 | 241,0-247,0 | 1070 | | 900 700 | 265,0-271,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | . 4 394 126 | | | 700 | 252 0 250 0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 | 232,0-238,0 | 920 | | 700 | 253,0-259,0 | 100 | 150,0-170,0 | 500 | ,5,0 - |
| AC-Nr 750 | . 4 394 128 244,0-250,0 | 770 | | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| | . 4 394 130 | 020 | | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19.0-2 |
| 800 | 239,0-245,0 | 820 | | 000 | 240,0 204,0 | | , | | |
| AC-Nr 1000 | 212,0-218,0 | 1020 | | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| | . 4 394 134 | 920 | | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-3 |
| 900 | 288,0-294,0 | 320 | | 700 | 207,0 230,0 | | , , | | |
| AC-Nr 1000 | 255,0-261,0 | 1020 | | 800 600 | 272,0-278,0 270,0-276,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| AC-Nr | ·. 4 394 138 | | | | | | | | |
| | 239,0-245,0 | 1070 | | 900 700 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| AC-Ni | r. 4 394 140 | | | | | | | | |
| 1000 | 215,0-221,0 | 1020 | | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| | r. 4 394 142 | 000 | | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 | 19.0-2 |
| 900 | 222,0-228,0 | 920 | | / 00 | 204,U-20U,U | 100 | 100,0 170,0 | - 555 | , |
| AC-N: 1050 | r. 4 394 144 257,0-263,0 | 1070 | | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 27,0-3 |
| AC-N | r. 4 394 148 | | | | | | | | |
| _ | values in brackets, 0 | 1075 | | 900 | 309,0-315,0 | 100 | 130,0-170,0 • 1 mm less contr | | |
| | r. 4 394 150 268,0-274,0 | 1070 | | 900 700 | | 100 | 130,0-170, | 0 300 | 19,0- |

| Full-load | | Breakaway '20 | Fuel deliv | ery characteristics (5a) peed (5b) | שוטון | | Low idle speed 5 |
|-----------------|-------------------------------|---------------|-------------------|---------------------------------------|----------|---|-----------------------------|
| Test oil te | mp. 40°C (104°F) (2) | rev/min (a) | | cm³/1000 strokes | switchin | cm ³ /1000 strakes | travel |
| rev/min 1 | cm ³ /1000 strokes | rev/min 3 | rev/min 4 | 5 | 6 | 7 | 8 9 |
| AC-Nr | 4 394 152 | | | | į | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| lC-Nr | . 4 394 154 | | | 202 2 202 4 | 100 | 120 0-170 0 | 300 19,0-25,0 |
| 1050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 000 (0,00 = 0,0 |
| AC-Nr | . 4 394 156 | | | | | | 200 40 0 25 0 |
| 1050 | 296,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | 100 | 130,0-1/0,0 | 300 19,0-25,0 |
| AC-Nr | . 4 394 157/15 | | 000 | 252 0 250 0 | 100 | 130 0-170.0 | 300 19,0-25,0 |
| 1050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 13030 17030 | |
| | . 4 394 160 | 4070 | 900 | 230,0-235,0 | 100 | 130.0-170.0 | 300 19,0-25,0 |
| 1050 | 208,0-214,0 | 1070 | 700 | 260,0-266,0 | 100 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| | r. 4 394 162 | 020 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| 900 | 181,0-187,0 | 920 | 700 | 17230 17030 | ••• | • | |
| AC-N: 925 | r. 4 394 164 176,0-182,0 | 945 | 800 | 162,0-168,0 | 100 | 130,0-170, | 0 300 19,0-25,0 |
| 323 | 170,0 102,0 | - | 700 | 177,0-183,0 | | | |
| AC-N 900 | r. 4 394 166 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170, | 0 300 19,0-25, |
| | r. 4 394 168 | 320 | | | | | |
| 925 | 237,0-243,0 | 945 | 800 | 251,0-257,0 | 100 | 130,0-170, | 0 300 27,0-33, |
| | - | | 700 | 269,0-275,0 | | | |
| AC-N 700 | 1r. 4 394 170 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170, | 0 300 27,0-33, |
| | 218,0-224,0 Ir. 4 394 176 | 720 | | - | | | |
| 1050 | | 1070 | 900 | | | 130,0-170 | 0 300 19,0-25 |
| | • | | 700 | 240,0-246,0 | 1 | | |
| | Nr. 4 394 246 | | | 227 E 247 C | 100 | 130 0-170 | ,0 300 19,0-25 |
| 1050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 258,5-269,5 | • | 140,0 170 | ,, |
| | Nr. 4 3942248 | | | 200 | 100 | 120 0_170 | ,0 300 19,0-25 |
| 700 Checking | 246 , 0 values in brackets | 720 | 600 | 263,0 | 100 | | trol rod travel than col. 2 |
| | Nr. 4 394 250 | 4000 4000 | | | 100 | 130.0-170 | ,0 300 19,0-25 |
| 105 | 0 244,5-254,5 | 1060-1080 | | | , 00 | , | • |

| C. | Settings | for | Fuel | Injection | Pump with | Fitted | Governor |
|----|-----------------|-----|------|-----------|------------------|---------------|----------|
| | | | | | | | |

| Full-load deliv Control-rod st Test oil temp. | 00 | Breakaway | 1 (2b) Fuel deli high idle | very characteristics(5e) aposot (50) | Sterang idle switchin | fuel delivery 6 | LOW 10 | le speed 5 |
|---|------------------------------|-----------|-------------------------------|---|-----------------------------|-------------------|------------|----------------|
| | n ³ /1000 strokes | rev/min | 4a rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 2 | | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| AC-Nr. 4 | 394 257 | | • | 1 | • | • | | • |
| | 0,98 | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| Ac-Nr. | 394 314 | | | | | | | |
| 1050 24 | 16,0 | 1070 | 900 200 | 240,0 267,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 394 331 | | | | | | | |
| 1050 24 | 11,0-247,0 | 1070 | 900 700 | 265,0-271,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 394 332 | | | | | | | |
| 1050 26 | 53,0-274,0 | 1070 | 900 700 | 274,0-280,0 280,0-286,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 394 347 | | | | | | | |
| 1050 26 | 59,0-275,0 | 1070 | 900 700 | 281,0-287,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 394 348 | | | | | | | |
| 1050 23 | 34,0-240,0 | 1070 | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 394 349 | | | | | | | |
| 1050 20 | 08,0-214,0 | 1070 | 900 700 | 230,0-236,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 394 350 | | | | | | | |
| 1050 20 | 52,0-268,0 | 1070 | 900 700 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 394 351 | | | | | | | |
| 1050 2 | 53,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 1 394 352 | | | | | | | |
| 1050 20 | 52,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 353 | | | | | | | |
| 1050 2 | 79,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 394 354 | | | | | | | |
| 1050 2 | 96,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 356 is in brackets | | | | | * 1 mm lers contr | ol rod tra | ivel than col. |

C7

①

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load delivery | Breakaway 20 | Fuel de high idle | livery characteristics 54 | Starting | fuel delivery 6 | Low idl | e speed 5 |
|---|---------------|----------------------|-------------------------------|----------|--------------------------------|---------|-----------------------|
| Control-rod stop Test oil temp. 40°C (104°F) | ' I | | | i | ng point | | Control rod travel |
| rev/min cm³/1000 strokes | rev/min 4a | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | mm 9 |
| AC-Nr. 4 394 386 | 3 | + | - | 1 | | | |
| 600 167,0-175,0 | 620 | | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| AC-Nr. 394 390 900 259,0-267,0 | 925 | 700 | 238,0-246,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 428 1000 188,0-196,0 | 1025 | 800 | 180,0-187,0 | 100 | 130,0-170,0 | 300 2 | 5,0 |
| AC-Nr. 4 394 473 850 189,0-197,0 | 875 | 750 | 185,0-193,0 | 100 | 130,0-170,0 | 325 3 | 0,0 |
| AC-Nr. 4 394 501 900 175,0 | 925 | 700 | 158,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 521 1000 239,0-247,0 | 1025 | 700 | 229,0-235,0 | 100 | 130,0-170,0 | 300 2 | 5,0 |
| AC-Nr. 4 394 527 900 161,0 | 925 | 800 | 151,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 541 1050 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 550 1000 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 561 1050 258,0 | 1060-80 | 900 | 256,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 564 1050 244,0 | 1070 | 900 | 234,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 569 1000 203,0-211,5 | 1010-1030 | | • | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 590 1050 260,5-271,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 593. 1050 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 703 1050 260,5-271,0 | 1060-1080 | 900 700 | 267,0-278,0 267,0-278,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 4 394 705/70 Checking values in brackets En 1050 258,0 | 06 1060-80 | 900 | 256,0 | 100 | * 1 mm less con 130,0-170,0 | | _ |

C. Settings for Fuel Injection Pump with Fitted Governce

| Full-load Control- | | Breakaway (2 | 9 | uel delin | very characteristics (5) | 1dle | fuel delivery 6 | Low id? | e speed 5) |
|-----------------------|---|--------------|---------------|-----------|----------------------------|------|-----------------------------|-------------------------|---|
| Test oil t | emp. 40°C (104°F) (2) | rev/min | $\overline{}$ | ev/min | cm³/1000 strokes | İ | ing point cm³/1000 strokes | rev/min 1 | Control rod travel mm |
| rev/min | cm ³ /1000 strokes | rev/min C | <u>ار</u> | gy/min | 5 | 6 | 7 | 8 | 9 |
| AC-Nr. | 4 394 707 | | į | | 1 | 1 | i | , , | • |
| 1050 | 244,0 | 1070 | 90 | 00 2 | 34,0 | 100 | 130,0-170,0 | 300 19 | ,0~25,0 |
| AC-Nr. | 4 394 718 | | | | | | | | |
| 955 | 198,0-213,0 | 65-975 | 80 | 00 1 | 96,0-210,0 | 100 | 130,0-170,0 | 300 21 | ,0-27,0 |
| AC-Nr. | 4 394 719 | | | | | | | | |
| 875 | 166,0-168,0 | 915 | 60 | 00 1 | 42,5-146,5 | 100 | 130,0-170,0 | 300 21 | ,0-27,0 |
| AC-Nr. | 4 394 733 | | | | | | | | |
| 1000 | 255,0-261,0 | 1020 | 80 | | , , . | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| | | | οι | 00 2 | 270,0-276,0 | | | | |
| | 4 394 740/741 | 4020 4040 | ^ | 12 7 | 000 N=240 N | | | | |
| | 213,0-226,0 | 1030-1040 | 9 | 15 2 | 208,0-218,0 | | | | |
| | 4 394 744 | 1000 4000 | 01 | 00 0 |) F.C. () | 100 | 130,0-170,0 | 300 19 | 0-25.0 |
| | | 1060-1080 | 91 | 00 2 | 256,0 | 100 | 130,0-170,0 | 300 13 | ,0 20,0 |
| | 4 394 745 | 000 | - | FO 4 | 100 0 202 0 | 100 | 130,0-170,0 | 300 21 | 0-27 D |
| 950 | 208,0-214,0 | 990 | /: | 50 1 | 196,0-202,0 | 100 | 130,0-170,0 | 300 ZI | ,0-27,0 |
| | 4 394 746 | | _ | 00 4 | | 100 | 130,0-170,0 | 200 1Q | 0-25 0 |
| 875 | 161,0-165,0 | 890 | ь | 00 1 | 140,0-144,0 | 100 | 130,04170,0 | 300 13 | ,0-23,0 |
| | 4 394 771 | | _ | 00 (| 100 0 400 0 | 100 | 130,0-170,0 | 200 10 | 0-25 0 |
| 800 | 113,0-119,0 | 820 | б | 00 1 | 102,0-108,0 | 100 | 130,0-170,0 | 300 13 | ,0-25,0 |
| | 4 394 773 | | _ | | | 400 | 130,0-170,0 | 200 10 | . n - 25 n |
| 800 | 125,0-131,0 | 820 | 6 | 00 ′ | 134,0-140,0 | 100 | 130,0-170,0 | 300 13 | ,0-25,0 |
| | 4 394 775 | | _ | | | 400 | 130,0-170,0 | 200 10 |) N_2E N |
| 1025 | 192,0-198,0 | 1045 | 9 | 00 | 180,0-186,0 | 100 | 130,0-170,0 | 300 13 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| | 4 394 777 | | _ | | | | 420 0 470 0 | 200 10 |) n_2E n |
| 1000 | 200,0-206,0 | 1020 | | | 180,0-186,0 189,0-195,0 | 100 | 130,0-170,0 | 300 13 | 7,0-25,0 |
| AC No | 4 394 779 | | | | | | | | |
| 940 | | 955-65 | | | | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| - | | | | | | | | | |
| | 4 394 781 230,0-236,0 | 1040 | 9 | 00 | 207,0-213,0 | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| 1025 | 200,0 200,0 | | | | 209,0-215,0 | • | | | |
| AC-Nr. | . 4 394 783 | | | | | | | | |
| 1000 Checkin | 227,0-233,0 g values in brackets | 1020 | 8 | 300 | 197,0-203,0 | 100 | 130,0-170,0 1 mm less co | 300 19 ntrol rod tra | 9,0-25,0 ivel than col. 2 |
| En | • · • · · · · · · · · · · · · · · · · · | | | r | | | | | |

| . Settings for Fuel Injection | Pump with Fitted Governor |
|-------------------------------|----------------------------------|
|-------------------------------|----------------------------------|

| Full-load d Control-to- Test oil ter | | Breakaway | 2 | Fuel delh high idle s | rery characteristics (56) | Starting I Idle switchin | ruel delivery 6 | Low id | Control rod |
|--|---|--------------|----------|--------------------------|--|--------------------------------|-------------------------------|--------------|--------------------------------|
| rev/min 1 | cm ³ /1000 atrokes | rev/min 3 | 49 | rev/min | cm ³ /1 000 strokes 5 | rev/min 6 | cm ³ /1000 strokes | rëv/min 8 | |
| 1000 | 4 394 785 235,0-241,0 | 1020 | | 760 | 263,0-269,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | 4 394 787 220,0-226 | 1020 | | | 209,0-215,0 227,0-233,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | 4 394 789 190,0 | 930 | | | | 100 | 130,0-170,0 | 300 | 25,0 |
| AC-Nr. 900 | 4 394 791 160,0-166,0 | 920 | | 700 | 139,0-145,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 600 | . 4 394 793 124,0-130,0 | 620 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 700 | . 4 394 795 127,0-133,0 | 720 | | 600 | 124,0-130,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 800 | . 4 394 797 139,0-145,0 | 820 | | 600 | 124,0-130,0 | 100 | 130,0-170,0 | 300 | 19,0-25,6 |
| AC-Nr 925 | . 4 394 799 157,0-163,0 | 945 | | 800 600 | 145,0-151,0 134,0-140,0 | 100 | 130,0-170, | 300 | 19,0-25, |
| AC-Nr 1000 | 180,0-186,0 | 1020 | | 800 700 | 154,0-160,0 142,0-148,0 | 100 | 130,0-170, | 0 300 | 19,0-25, |
| AC-Nr 1050 | 207,0-213,0 | 1070 | | 900 800 | 161,0-175,0 147,0-153,0 | 100 | 130,0-170, | 0 300 | 19,0-25, |
| AC-Nr 900 | 4 394 805 187,0-193,0 | 920 | | 700 | 162,0-168,0 | 100 | 130,0-170, | 0 300 | 27,0-33 |
| AC-Ni 900 | r. 4 394 807 200,0-206,0 | 920 | | 700 | 184,0-190,0 | 100 | 130,0-170, | ,0 300 | 27,0-33 |
| 900 | r. 4 394 809 203,0-209,0 | 920 | | 700 | 209, 0- 215,0 | 100 | 130,0-170 | ,0 30 | 19,0-25 |
| AC-N 750 | r. 4 394 811 185,0-191,0 | 770 | | 600 | 222,0-228,0 | 100 | 130,0-170 | ,0 30 | 0 19,0-25 |
| AC-N Checking 800 | r. 4 394 813 values in brackets 210,0-218,0 | 820 | | 600 | 223,0-229,0 | 100 | | | ravel than col. 2 0 19,0-25 |

| C | Settings for | Fuel Inject | ion Pump 1 | with Fitted | Governor |
|----|--------------|--------------|------------|---------------------------------------|----------|
| ·· | COLLINE IA | 1 400 111700 | | · · · · · · · · · · · · · · · · · · · | |

| Full-load delivery Control-rod stop | Breakaway | 20 Fuel de | livery characteristics | - IOIE | ider delivery | Low idle speed 5 |
|-------------------------------------|-----------|------------|----------------------------|--------|---|---|
| Test oil temp. 40°C (104°F) (2 | rev/min | 49 rev/min | | | cm ³ /1000 strokes | control rod travel rev/min mm |
| rev/min cm³/1000 strokes | 3 | 4 | 5 | 6 | 7 | 8 9 |
| NC-Nr. 4 394 815 | | 1 | ħ. | 1 | • | • |
| 050 222,0-228,0 | 1070 | | .0-,0 -00,0 | 100 | 130,0-170,0 3 | 00 19,0-25,0 |
| | | 700 2 | 207,0-213,0 | | | |
| AC-Nr. 4 394 817 | | | | | | 00 40 0 05 0 |
| 1000 240,0-246,0 | 1020 | • | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 3 | 00 19,0-25,0 |
| | | 600 | 237,0-243,0 | | | |
| AC-Nr. 4 394 819 | | | | | 400 0 470 0 3 | onn 10 N-25 N |
| 1050 245,0-251,0 | 1070 | | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 3 | 19,0-23,0 |
| | | 700 | 257,6 240,0 | | | |
| AC-Nr. 4 394 821 | | | | 400 | 130,0-170,0 | 200 19.0-25.0 |
| 1000 217,0-223,0 | 1020 | | 197,0-203,0 219,0-225,0 | 100 | 130,0-170,0 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| | | | 2,0,0 | | | |
| AC-Nr. 4 394 823 | | 700 | 212,0-218,0 | 100 | 130.0-170.0 | 300 27,0-33,0 |
| 900 210,0-216,0 | 920 | 700 | 212,0-210,0 | 100 | 100,0 170,0 | |
| AC-Nr. 4 394 825 | | | | | 400 0 470 0 | 200 40 0-25 0 |
| 1050 269,0-275,0 | 1070 | 900 700 | 281,0-287,0 293,0-299,0 | 100 | 130,0-1/0,0 | 300 19,0-25,0 |
| | | 700 | 293,0 233,0 | | | |
| AC-Nr. 4 394 827 | | | | 400 | 420 0 170 0 | 300 19,0-25,0 |
| 1050 234,0-240,0 | 1070 | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 13,0 23,0 |
| | | 700 | 200,0 0, ,, | | | |
| AC-Nr. 4 394 829 | · | 000 | 070 0 205 0 | 100 | 130 0-170 0 | 300 19,0-25,0 |
| 1050 262,0-268,0 | 1070 | 900 700 | 279,0-285,0 289,0-295,0 | 100 | 130,0 170,0 | |
| | | | | | | |
| AC-Nr. 4 394 831 | 4070 | 900 | 265,0-271,0 | 100 | 130.0-170.0 | 300 19,0-25,0 |
| 1050 241,0-247,0 | 1070 | 700 | 268,0-274,0 | 100 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| | | | | | | |
| AC-Nr. 4 394 833 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| 900 232,0-238,0 | 920 | , 00 | 200,0 200,0 | | | |
| AC-Nr. 4 394 835 | | 700 | 050 0 050 0 | 100 | 130 0-170.0 | 300 19,0-25, |
| 750 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 .3,0 20, |
| AC-Nr. 4 394 837 | | | | | | 000 40 0 35 |
| 800 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 19,0-25, |
| AC-Nr. 4 394 839 | | | | | | |
| 1000 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 19,0-25, |
| · | | | | | | |
| AC-Nr. Checking values in brackets | | | | | * 1 mm less co | ntrol rod trav el than coi |
| En4 394 841 | 920 | 700 | 287,0-293,0 | 100 | 130.0-170.0 | 300 27,0-33, |
| 900 288,0-294,0 | 320 | 700 | 20.,0 200,0 | | | |

①

C. Settings for Fuel Injection Pump with Fitted Governor

| Futi-load de Control-rod Test oil tem | livery stop p. 40°C (104°F) 2 | Breakaway | (20) Fuel de high id | e speed (50) | 1016 | fuel delivery 6 | 101 | e speed 5 |
|---|--|-----------|-------------------------|----------------------------|----------------|-------------------------------|--------------|--------------|
| | cm ³ /1000 strokes | rev/min | rev/mi | | rev/min | cm ³ /1000 strokes | rev/min 8 | travel mm |
| 2.11. | 2 204 942 | 3 | | 5 | - | | | · |
| | 1 394 843 55,0-261 | 1020 | 800 600 | 272,0-278,0 270,0-276,0 | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| | 4 394 845 39,0-245,0 | 1070 | 900 700 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| - | 4 394 847 15,0-221,0 | 1020 | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| | 4 394 849 22,0-228,0 | 920 | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 1! | 9,0-25,0 |
| | 4 394 851 57,0-263,0 | 1070 | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| - | 4 394 853 95,0-303,0 | 1075 | 900 | 309,0-315,0 | 100 | 130,0-170,0 | 300 2 | 5,0 |
| _ | 4 394 857 62,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| _ | 4 394 861 96,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| - | 4 394 863 53,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 865 08,0-214,0 | 1070 | 900 700 | 230,0-236,0 260,0-266,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 867 81,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 869 76,0-182,0 | 945 | 800 700 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 871 73,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| Checking v | 4 394 873 relues in brackets 237,0-243,0 | 945 | 800 700 | 251,0-257,0 269,0-275,0 | 100 | 1 mm less cor | | |

C12

| ull-load d | | Breakaway 🕿 | Fuel delin | rery characteristics (5a) | NOIG . | | LOW 10 | le speed 5 |
|---------------------------------------|---|-------------|-------------------|---|---------------------|-----------------------------|----------------------|-----------------------------------|
| Control-ro lest oil ter rev/min | d stop np. 40°C (104°F) 2 cm³/1000 strokes | rev/min 4a | .i | cm³/1000 strokes | switchin rev/min | g point cm³/1000 strokes | rev/min | 1 |
| | 2 | 3 | | 5 | 6 | 7 | 8 | 9 |
| AC-Nr. 700 | ' 4 394 875 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0~170,0 | 300 | 27,0-33,0 |
| AC-Nr | . 4 394 877 | | | | | | | |
| - | 213,0-219,0 | 1060-1080 | 900 700 | 212,0-218,0 24C,0-246,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | . 4 394 879 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr 700 | . 4 394 881 246,0 | 720 | 600 | 263,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | . 4 394 883 244,5 | 1060-1080 | | 254,5 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr 600 | 258,0 | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| AC-Nr 600 | . 4 394 891 167,0-175,0 | 620 | | | 100 | 130,0-170, | 0 300 | 25,0 |
| | . 4 394 893 259,0-267,0 | 925 | 700 | 238,0-246,0 | 100 | 130,0-170, | 0 300 | 19,0-29,0 |
| AC-N1 1000 | r. 4 394 895 188,0-196,0 | 1025 | 800 | 180,0-187,0 | 100 | 130,0-170, | 0 300 | 25,0 |
| AC-N: 850 | r. 4 394 897 189,0-197,0 | 875 | 750 | 185,0-193,0 | 100 | 130,0-170, | 0 325 | 30,0 |
| AC-N: | r. 4 394 890 175,0 | 925 | 700 | 158,0 | 100 | 130,0-170, | 0 300 | 19,0-25,0 |
| | r. 4 394 905 239,0-247,0 | 1025 | 700 | 229,0-235,0 | 100 | 130,0-170, | 0 300 | 25,0 |
| AC-N 900 | r. 4 394 907 161,0 | 925 | 800 | 151,0 | 100 | 130,0-170, | ,0 300 | 19,0-25,0 |
| | r. 4 394 909 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170 | ,0 30 | 19,0-25,0 |
| | r. 4 394 911 230,5-239,5 values in brackets | 1010-1030 | | | 100 | 130,0-170 *1 mm less cor | , 0 30! ntrol rod | 0 19,0-25,0 travel than col. 2 |
| | r. 4 394 915 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170 | , 0 300 | 19,0-25,0 |

| Full-load de Control-rod Test oil tem | | Brezkaway 26 | Fuel definition to | rery characteristics (5e speed (5b) | Starting Idle switchin | | Low idl | e speed 5 Control rod |
|---|-------------------------------|--------------|--------------------|-------------------------------------|------------------------------|------------------------------------|--------------|------------------------|
| rev/min | cm ³ /1000 strokes | rev/min 4a | rev/min | cm ³ /1000 strokes | rev/min 6 | cm ³ /1000 strokes 7 | rev/min 8 | mm 9 |
| 1 | 2 | | + | | 1 | | | |
| | 4 394 917 260,5-271,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 394 919 215,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 394 921 260,5-271,0 | 1060-1080 | 900 700 | 267,0-278,0 267,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 394 925 244,0 | 1070 | 900 | 234,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. 900 | 4 394 997 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |

Checking values in brackets

En

* 1 mm less control rod travel than col. 2

Test Specifications Fuel Injection Pumps ① and Governors

40

WPP 001/4 ALO 16,0 a

1. Edition

PE 6 P 120/420 LS 152

RQV 300-1025 PA 112 KR

supersedes

0 401 846 180 1 - 5 - 3 - 6 - 2 - 4 (60°)

Calibrating nozzle-and-holder assembly 0 681 443 022 Test-pressure line 9 681 230 703 company:Allis-Chalmers engine: 16000-2500

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel injection Pump Settings

Port closing at prestroke

2,80+0,1

mm (from BDC)

| Rotational speed rev/min 1 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strckes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|----------------------------------|----------------------------------|--|---|----------------------------------|--|--|
| 1000 | 12 | 26,4-27,1 | 1,0 | | | |
| 600 | 6 12 15 | 8,6- 9,1 26,3-28,2 33,8-36,2 | | | | |
| 200 | 6 | 4,2-5,2 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rated s | peed | | Intermediate | rated sp | eed | Lower rated | speed | 1 | Sliding s | leeve travel |
|---------------|--------------------------------------|---|---------------------------------|----------|-----------------------|---------------------------------|--------------------------|-------------------------------|-----------|--------------|
| deflection | | Control rod ta | Degree of deflection of control | <u> </u> | Control rod travel | Degree of deflection of control | | Control rod travel | | 0 |
| lever | | rev/min 20 | lever | rev/min | mm 4 | iever | rev/min | mm (3) | rev/min | mm |
| 9 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 66° | 1050 1100 1150 1210 1300 | 15 - 18 10,7- 15 6,0-11,6 0,7 0 | , | | | 10° | 250 350 450 550 | 6,4-8,0 3,0-5,2 1,3-2,8 | | |
| | | | | | <u> </u> | 3a | | | | |

Torque control travel a =

mr

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load d Control-ro Test oil ter | | Rotational-speed 2b timitation intermediate speed | Fuel deli- high idle s | rery characteristics 5e poed 50 | Starting Idle switchin | • | Torque- travel | Control rod |
|---|------------------|---|---------------------------|---------------------------------|------------------------------|-------------------------------|-------------------|--------------|
| rev/min | cm³/1000 strokes | rev/min 49 | rev/min | cm ³ /1000 strokes | rev/min | cm ² /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |
| l | | | | | | | | |
| ļ · | İ | | } | | | | | |
| | 1 | · | | | i | | | 1 |
| | | | | | | | | |
| ł | l | | 1 | | l | • | | |
| | | | | | <u> </u> | | | |

Checking values in brackets

* 1 mm less control red travel then col. 2

| C. Settings for Fuel Injection Pump with Fitted Governor | 16,0 | a | -2 |
|--|------|---|----|
|--|------|---|----|

0

| Full-load d Control-ro Test oil ten | | Breakaway | Fuel deli- high idle t | very characteristics (5a speed (5b) | idle | fuel delivery 6 | Low idle speed 5 |
|---|----------------------------------|---------------|---------------------------|---|--------------|------------------------------------|--|
| rev/min | cm³/1000 strokes | rev/min 3 | rev/min | cm ³ /1 000 s trokes 5 | rev/min 6 | cm ³ /1000 strokes 7 | travel rev/min mm 8 9 |
| AC-Nr. | 4 392 715 | 1 | 1 | l | İ | 1 | 1 1 |
| 1050 | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | . 4 392 717 | | | | | | |
| 1050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | 4 392 719 | | | | | | |
| 1050 | 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | . 4 392 721 | | | | | | |
| 1050 | 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | 4 392 723 | | | | | | |
| 750 | 244,0-250,0 | 7 70 ~ | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | 4 392 725 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | 4 392 727 | | | | | | |
| | 232,0-238,0 | 920 | 700 | 253,0-259 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | 4 392 729 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | 4 392 731 | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 27,0-33,0 |
| | 4 392 735 239,0-245,0 | 1070 | 900 | 233,0-239,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | | | 700 | 273,0-279,0 | | | |
| | 4 392 737 215,0-221,0 | 1020 | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC - Nm | 4 392 739 | | 000 | 220,0 220,0 | | | |
| | 207,0-213,0 | 1070 | 900 700 | 195,0-201,0 225,0-231,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | 4 392 741 | | | | | | . • |
| | 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | 100 | 130,0-170,0 | |
| | 4 392 743 | | | | 400 | 100 0 170 5 | 40.000 |
| 1050 thecking val | 220 ,0-226 ,0 ues in brackets | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | 100 | 13U,0-170,0 • 1 mm less contro | 19,0-25,0 ol rod travel than col. 2 |

Testoil-ISO 4113

En

| Full-load di Control-rod Test oil tem | | Breakaway (2 | Fuel delivingh idle s | rery characteristics(5a peed (5b) | Idie | fuel delivery (6) | Low rate speed 5 |
|---|---------------------------------|-----------------|-----------------------|--------------------------------------|--------------|---------------------------------|--|
| rev/min | cm³/1000 strokes | rev/min 4 | rev/min | cm³/1000 strokes | rev/min 6 | cm³/1000 strokes | rev/min mm 8 9 |
| AC-Nr. | 4 392 747 | • | • | • | • | • | |
| 1050 | 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 392 749 | | | | | | |
| 1050 | 230,0-234,0 | 1070 | | | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 392 750 | | | | | | |
| 1050 | 230,0-234,0 | 1070 | | | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 392 768 | | | | | | |
| 800 | 123,0-133,0 | 820 | 600 | 132,0-142,0 | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 392 775/ | .776 | | | | | |
| 875 | 162,0-164,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 392 777 | | | | | | |
| 950 | 205,0-207,0 | 970 | 700 | 195,0-199,0 | 100 | 130,0-170,0 | 300 19,0-25 |
| | 4 392 778 | | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 21,0-27 |
| AC-Nr. | 4 392 779 | | | | | | |
| 1025 | 190,0-200,0 | 1030-40 | 1000 900 | 191,0-201,0 178,0-188,0 | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 392 781 | | | | | | |
| 1025 | 228,0-238,0 | 1050-60 | 900 700 | 205,0-215,0 207,0-217,0 | 100 | 130,0-170,0 | 300 19,0-2 |
| AC-Nr. | 4 392 953 | | | | | | |
| 940 | 185,0-195,0 | 955-65 . | | | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 393 095 | | | | | | |
| 1050 | 211,0-221,0 | 1060-80 | 900 700 | 210,0-220,0 238,0-248,0 | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 393 307 | , | | | | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 27,0-33 |
| AC-Nr. | 4 393 431 | | | | | | |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 19,0-25 |
| AC-Nr. | 4 393 821 | | | | | | |
| | 242,0-248,0 lues in brackets | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | 100 | 130,0-170,0 *1 mm less contr | 300 19,0-25 of rod travel than col. |

ALO 16,0 a -4-

| Full-load d | | Breakaway 💩 | Fuel delin | very characteristics (56) | Idle | fuel delivery 6 | Low idl | e speed 5 |
|---------------|--|--|------------|-------------------------------|------|---|------------|-----------------------------|
| Test oil ter | mp. 40°C (104°F) 2 cm³/1000 strokes | rev/min 4a | rev/min | cm ³ /1000 strokes | l | ng point cm ³ /1000 strokes | rev/min | Control rod travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| AC-Nr | . 4 393 823 | ' | J | | • | • | | , , |
| 1050 | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr | . 4 393 825 | | | | | | | |
| 1050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr | . 4 393 827 | | | | | | | |
| 1050 | 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr | . 4 393 829 | | | | | | | |
| 1050 | 230,0-234,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | . 4 393 831 | | | | | | | |
| 1050 | 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | 100 | 130,0-170,0 | | |
| AC-Nr | . 4 393 833 | | | | | | | |
| 1050 | 264,0 | 1060-1080 | 900 | 280,5 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | . 4 393 835 | | | | | | | |
| 1050 | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | . 4 393 837 | | | | | | | |
| 1050 | 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | . 4 393 890 | | | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-27,0 |
| AC-Nr. | . 4 393 891 | | | | | | | |
| 955 | 208,0 | 965-975 | 895 | 203,0 | | | | |
| | 4 393 961 | 000 | 700 | 470 0 470 0 | 400 | 400 0 470 0 | 200 | 40 0 05 0 |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | . 4 394 001 | 720 | 600 | 240 0 246 0 | 100 | 130,0-170,0 | 200 | 27 N_22 N |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| AC-Nr. 950 | . 4 394 017 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-27,0 |
| AC-Nr. | . 4 394 020 | | | | | | | |
| 700 | 249,0-257,0 | 725 | 600 | 258,0-264,0 | 190 | 130,0-170,0 | | _ |
| Checking v | alues in brackets | ما المالية المالية المالية المالية المالية المالية المالية المالية المالية المالية المالية المالية المالية الم | | سرية المسجد التناوم التناوم | | * 1 mm less contr | ol rod tra | vel than col. 2 |

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C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load delivery Control-rod stop | Breakaway | (20) Fuel delh high idle s | rery characteristics (5a) | Starting Idle | fuel delivery 6 | Low id | le speed 3 |
|--|--------------|-------------------------------|------------------------------------|------------------|-------------------------------|--------------|-----------------------------|
| Test oil temp. 40°C (104°F) (2) rev/min cm³/1000 strokës 1 2 | rev/min 3 | rev/min | cm ³ /1000 strokes 5 | | cm ³ /1000 strokes | rev/min 8 | Control rod travel mm |
| AC-Nr. 4 393 890 950 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-27,0 |
| AC-Nr. 4 393 891 955 208,0 | 965-975 | 895 | 203,0 | | | | |
| AC-Nr. 4 393 961 900 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 001 700 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| AC-Nr. 4 394 017 950 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-27,0 |
| AC-Nr. 4 394 020 700 249,0-257,0 | 725 | 600 | 258,0-264,0 | 100 | 130,0-170,0 | 300 | 19,0-29,0 |
| AC-Nr. 4 394 062 800 113,0-119,0 | 820 | 600 | 102,0-108,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 064 375 161,0-165,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 066 800 125,0-131,0 | 820 | 600 | 134,0-140,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 068 1025 192,0-198,0 | 1045 | 900 | 180,0-186,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 070 1000 200,0-206,0 | 1020 | 800 600 | 180,0-186,0 189,0-195,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 072 940 185,0-195,0 | 955-65 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 074 1025 230,0-236,0 | 1040 | 900 700 | 207,0-213,0 209,0-215,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 076 1000 227,0-233,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 078 1000 235,0-241,0 | 1020 | 700 | 263,0-269,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |

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| C | Settings | for Fue | Injection | Pump with | Fitted Governor |
|---|------------------|---------|-----------|------------------|-----------------|
| • | CO 001112 | | | • | |

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) (2) | Breakaway | 1 (20) Fuel delinigh idle | very characteristics (5) | LOID | g fuel delivery 6 ling point | Control rod |
|---|-----------|---------------------------|-------------------------------|--------|---------------------------------|------------------------------|
| rev/min cm³/1000 strokes | rev/min | rev/min | cm ³ /1000 strokes | rev/mi | n cm³/1000 strokes | rdv/min mm |
| $\frac{ }{ }^{1}$ $\frac{ }{ }^{2}$ AC-Nr. 4 394 080 | 3 | | 13 | -1 | | |
| 1000 220,0-226,0 | 1020 | | 209,0-215,0 227,0-233,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 082 910 190,0 | 930 | | | 100 | 130,0-170,0 | 300 25,0 |
| AC-Nr. 4 394 084 900 160,0-166,0 | 920 | 700 | 139,0-145,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 086 600 124,0-130,0 | 620 | | | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 088 700 127,0-133,0 | 720 | 600 | 124,0-130,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 090 800 139,0-145,0 | 820 | 600 | 124,0-130,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 092 925 157,0-163,0 | 945 | 800 600 | 145,0-151,0 134,0-140,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 094 1000 180,0-186,0 | 1020 | 800 700 | 154,0-160,0 142,0-148,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 096 1050 207,0-213,0 | 1070 | 900 800 | 161,0-175,0 147,0-153,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 098 900 187,0-193,0 | 920 | 700 | 162,0-168,0 | 100 | 130,0-170,0 | 300 27,0-33,0 |
| AC-Nr. 4 394 100 900 200,0-206,0 | 920 | 700 | 184,0-190,0 | 100 | 130,0-170,0 | 300 27,0-33,0 |
| AC-Nr. 4 394 102 900 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 104 750 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 106 800 210,0-218,0 | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 4 394 108 Checking values in brackets in 1050 222,0-228,0 | 1070 | 900 700 | 202,0-208,0 207,0-213,0 | 100 | 130,0-170,0 | control rod travel than coi. |
| | | | | | estoil-19 | SO 4113 |

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C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load (| od stop | Breakaway | 20 Fuel deli- | very characteristics (5a speed (5b) | i cone | fuel delivery 6 | Control rod | | |
|-------------|---|-----------|---------------|-------------------------------------|--------|-------------------------------|------------------------------|--|--|
| Test oil te | imp. 40°C (104°F) (2) cm³/1000 strokes | rev/min | 4a rev/min | cm³/1000 strokes | 1 | cm ³ /1000 strokes | travel rev/min mm | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | | |
| AC-Nr. | . 4 394 110 | 1 | 1 | • | • | • | • | | |
| 1000 | 240,0-246,0 | 1020 | 800 600 | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| AC-Nr. | . 4 394 112 | | | | | | | | |
| 1050 | 245,0-251,0 | 1070 | 900 700 | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| AC-Nr. | . 4 394 114 | | | | | | | | |
| 1000 | 217,0-223,0 | 1020 | 800 600 | 197,0-203,0 219,0-225,0 | 100 | 130,0-170,0 | 300, 19,0-25,0 | | |
| AC-Nr | . 4 394 116 | | | | • | | | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0~170,0 | 300 27,0-33,0 | | |
| AC-Nr | . 4 394 118 | | | | | | | | |
| 1050 | 269,0-275,0 | 1070 | 900 | 281,0-287,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| AC-Nr | . 4 394 120 | | 700 | 293,0-299,0 | | | | | |
| | 234,0-240,0 | 1070 | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| AC-Nr | . 4 394 122 | | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| AC-Nr | . 4 394 124 | | | | | | | | |
| 1050 | 241,0-247,0 | 1070 | 900 700 | 265,0-271,0 268,0-274,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| | . 4 394 126 | | | | 400 | 400 0 470 0 | 200 10 0 25 (| | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| AC-Nr | 4 394 128 | | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| AC-Nr | . 4 394 130 | | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 19,0-25, | | |
| AC-Nr | . 4 394 132 | | ř | | | | | | |
| 1000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 19,0-25,0 | | |
| AC-Nr | ·. 4 394 134 | | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 27,0-33,0 | | |
| AC-Nr | ·. 4 394 136 | | | | | | · | | |
| 1000 | 255,0-261,0 | 1020 | 800 | 272,0-278,0 | 100 | | 300 19,0-25,0 | | |
| Checking | g values in brackets | | 600 | 270,0-276,0 | | * 1 mm less co | ntrol rod travel than col. 2 | | |

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C. Settings for Fuel Injection Pump with Fitted Governor

| Control-tod stop | | | 20 Fu | el deli h idle : | very characteristics (56 speed (5b) | / Idle | \sim | Low idle speed 5 | | |
|---------------------|---|---------|-------|---------------------|--|---------|-------------------------------|------------------|-----------------------|--|
| rev/min | emp. 40°C (104°F) (2) cm³/1000 strokes | rev/min | 49 | | 1 | 1 | ng point | 1 | Control rod travel | |
| 1 | 2 | 3 | 4 | v/min | cm ³ /1000 strokes | fev/min | cm ³ /1000 strokes | rev/mir | 9 | |
| AC-Nr | . 4 394 138 | 1 | | | 1 | | 1 | 1 | 1 | |
| | 239,0-245,0 | 1070 | | 00 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr | . 4 394 140 | | | | | | | | | |
| 1000 | 215,0-221,0 | 1020 | | 00 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr | . 4 394 142 | | | | | | | | | |
| 900 | 222,0-228,0 | 920 | 7 | 00 | 254,0-260,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr | . 4 394 144 | | | | | | | | • | |
| 1050 | 257,0-263,0 | 1070 | 7 | 50 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 | |
| | . 4 394 148 | | | | | | | | | |
| 1050 | • | 1075 | 9 | 00 | 309,0-315,0 | 100 | 130,0-170,0 | 300 | 25,0 | |
| | . 4 394 150 | 4.070 | _ | 00 | 074 0 000 0 | 400 | 420 0 430 0 | 200 | 40.000 | |
| 1050 | 268,0-274,0 | 1070 | | 00 00 | 274,0-280,0 280,0-286,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | . 4 394 152 | | | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | | | 267,0-273,0 267,0-273,0 | 100 | 130,0~170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | . 4 394 154 | | | | | | | | | |
| 1050 | 279,0-285,0 | 1070 | | | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | . 4 394 156 | | | | | | | | | |
| 1050 | 296,0-302,0 | 1070 | | | 301,0-307,0 309,0-315,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | . 4 394 157/15 | 8 | | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | | | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | . 4 394 160 | | | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | | | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| | . 4 394 162 | | | | | | | | | |
| 900 | 181,0-187,0 | 920 | 7 | 00 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| | . 4 394 164 | | _ | •• | | | | | | |
| 925 | 176,0-182,0 | 945 | | 00 00 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| cking val AC-Nr. | ues in brackets 4 394 166 | | | | | | * 1 mm less control | rod trave | el than col. 2 | |
| 900 | 173,0-179,0 | 920 | 8 | 00 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| | | | | | | | | | | |

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| Full-load de Control-roe Test oil ten | | Breakaway | 20 Fu | el delin ghidle s | very characteristics (5a) peed (5b) | Starting Idle switchir | fuel delivery 6 | Low in | Control roo |
|---|-------------------------------|-----------|--------|----------------------|--|------------------------------|-------------------------------|---------|-------------|
| rev/min | cm ³ /1000 strokes | rev/min | 49 100 | v/min | cm³/1000 strokes | rev/min | cm ³ /1000 strokes | rév/mir | travel |
| 1 | 2 | 3 | • | | 5 | 6 | 7 | 8 | 9 |
| | • | 1 | 1 | | • | • | | , | • |
| AC-Nr. | 4 394 168 | | | | | | | | |
| 925 | 237,0-243,0 | 945 | | 00 | 251,0-257,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| | | | , | 00 | 269,0-275,0 | | | | |
| AC-Nr. | 4 394 170 | | | | | | | | |
| 700 | 218,0-224,0 | 720 | 6 | 00 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| AC-Nr. | 4 394 176 | | | | | | | | |
| 1050 | 213,0-219,0 | 1070 | | 000 | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 246 | | 7 | 00 | 240,0-248,0 | | | | |
| | 211,0-220,0 | 1055-1075 | 9 | 75 | 237.5-247.0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 7 | ' 00 | 258,5-269,5 | | • | | |
| | | | 0 | 00 | 255,5-266,0 | | | | |
| AC-Nr. | 4 394 248 | | | | | | | | |
| 700 | 246,0 | 720 | 6 | 00 | 263,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 250 | | | | | | | | |
| 1050 | 244,5-254,5 | 1060-1080 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr | 4 394 257 | | | | | | | | |
| | 258,0 | | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| | - | | | | | | , | | • |
| | 4 394 314 | 4070 | , | 200 | 240.0 | 100 | 130,0-170,0 | 200 | 10 0-25 |
| 1050 | 246,0 | 1070 | _ | 700 . | 240,0 267,0 | 100 | 130,0-170,0 | 300 | 13,0-23 |
| - | 4 394 331 | 1070 | | 900 | 265,0-271,0 | 100 | 130,0-170,0 | 300 | 19 0-25 |
| 1050 | 241,0-247,0 | 1070 | | 700 | 268,0-274,0 | 100 | 130,0-170,0 | 300 | 13,0 23 |
| AC-No | 4 394 332 | | | | | | | | |
| - | 268,0-274,0 | 1070 | c | 900 | 274,0-280,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 1030 | 200,0 -27-4,0 | 1070 | | 700 | 280,0-286,0 | , , , | ,. | | , |
| AC-Nr. | 4 394 347 | | | | | | | | |
| | 269,0-275,0 | 1070 | 9 | 900 | 281,0-287,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | ,,- | | | 700 | 293,0-299,0 | | | | |
| AC-Nr. | 4 394 348 | | | | | | | | |
| | 234,0-240,0 | 1070 | | 900 | 246,0-252,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | - | | 7 | 700 | 268,0-274,0 | | | | |
| AC-Nr. | 4 394 349 | | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | | 900 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 7 | 700 | 260,0-266,0 | | | | |

Checking values in brackets

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* 1 mm less control rod travel than col. 2

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load delivery Control-rod stop | | | 2b) Fuel del high idle | ivery characteristics 54 speed (5b) |] Idle | ` | b) Low i | dle speed 5 | |
|--|--|-----------|---------------------------|--|---------|-------------------------------|-------------|-------------|--|
| Test oil temp. 40°C (104°F) (| | 7 H | \sim l | | 1 | ing point | | Control ro | |
| rev/min | cm ³ /1000 strokes | rev/min | rev/min | cm ³ /1000 strokes | rev/mir | cm ³ /1000 strokes | rev/mi 8 | 9 | |
| <u>. </u> | ! | | | | 1 | | | | |
| | . 4 394 350 | 4070 | 000 | 070 0 005 0 | 400 | 120 0 170 0 | . 200 | 40 0 25 | |
| 1050 | 262,0-268,0 | 1070 | 900 7 0 0 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| AC-Nr | . 4 394 351 | | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| AC-Nr | . 4 394 352 | | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| AC-Nr | . 4 394 353 | | | | | | | | |
| 1050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| AC-Nr | . 4 394 354 | | | • | | | | | |
| 1050 | 296,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| AC-No | . 4 394 356 | | . • • • | | | | | | |
| 1050 | 246,0 | 1070 | 900 | 240,0 | 100 | 130,0-170,0 | 300- | 19,0-25 | |
| | | | 700 | 267,0 | | | | | |
| AC-Nr. | . 4 394 386 | | | | | | | | |
| 600 | 167,0-175,0 | | | | 100 | 130,0-170,0 | 300 | 25,0 | |
| AC-Nr. | . 4 394 390 | | | | | • | | | |
| 900 | 259,0-267,0 | 925 | 700 | 238,0-246,0 | 100 | 130,0-170,0 | 300 | 19,0-29 | |
| AC-Nr. | . 4 394 428 | | | | | | | | |
| 1000 | 188,0-196,0 | 1025 | 800 | 180,0-187,0 | 100 | 130,0-170,0 | 300 | 25,0 | |
| AC-Nr. | . 4 394 473 | | | | | | | | |
| 850 | 189,0-197,0 | 875 | 750 | 185,0-193,0 | 100 | 130,0-170,0 | 325 | 30,0 | |
| AC-Nr | . 4 394 501 | | | | | | | | |
| 900 | 175,0 | 925 | 700 | 158,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| AC-Nr | . 4 394 521 | | | | | | | | |
| | 239,0-247,0 | 1025 | 700 | 229,0-235,0 | 100 | 130,0-170,0 | 300 | 25,0 | |
| AC-Nr | . 4 394 527 | | | | | | | •• | |
| | 161,0 | 925 | 800 | 151,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| AC-Nr | . 4 394 541 | | | | | | | | |
| checking ' | 202,0-210,5 values in brackets . 4 394 550 | 1060-1080 | | | 100 | 130,0-170,0 *1 mm less co | | | |
| , 10 .11 | 230,5-239,5 | | | | | 130,0-170,0 | | | |

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load o Control-ro Test oil ter | | Breakaway (| Fuel deli high idle | ivery characteristics (Sa speed (Sb) | Idle | fuel delivery 6 | Low idle speed |
|---|-----------------------------|-------------|------------------------|--------------------------------------|-------|---------------------|-------------------|
| rev/min 1 | cm³/1000 strokes | | rev/min | cm ³ /1000 strokes 5 | ı | čm³/1000 strokes | Control travel mm |
| AC-Nr. | 4 394 561 | | 1 | | 1 | | T T |
| 1050 | 258,0 | 1060-80 | 900 | 256,0 | 100 | 130,0-170,0 | 300 19,0-2 |
| AC-Nr. 1050 | 4 394 564 244,0 | 1070 | 900 | 234,0 | 100 | 130,0-170,0 | 300 19,0-2 |
| | 4 394 569 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 19,0-2 |
| | 4 394 590 260,5-271,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 19,0-2 |
| | 4 394 593 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | · |
| AC-Nr. | 4 394 703 260,5-271,0 | 1060-1080 | 900 700 | 267,0-278,0 267,0-278,0 | 100 | 130,0-170,0 | · |
| AC-Nr. | 4 394 705/706 | 5 | | | | • | |
| 1050 | 258,0 | 1060-80 | 900 | 256,0 | 100 | 130,0-170,0 | 300 19,0-2 |
| | 4 394 707 244,0 | 1070 | 900 | 234,0 | 100 | 130,0-170,0 | 300 19,0-2 |
| | 4 394 718 198,0-213,0 | 965-975 | 800 | 196,0-210,0 | 100 . | 130,0-170,0 | 300 21,0-27 |
| | 4 394 719 166,0-168,0 | 915 | 600 | 142,5-146,5 | 100 | 130,0-170,0 | 300 21,0-27 |
| | 4 394 733 255,0-261,0 | 1020 | | | 100 | 130,0-170,0 | 300 19,0-25 |
| 8C-N× | 4 394 740/741 | | 600 | 270,0-276,0 | | | |
| | • | 1030-1040 | 915 | 208,0-218,0 | | | |
| AC-Nr. 1050 2 | 4 394 744 258,0 | 1060-1080 | 900 | 256 , C | 100 | 130,0-170,0 | 300 19,0-25 |
| | 4 394 745 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 21,0-27 |
| | 4 394 746 161,0-165,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 19,0-25 |
| ecking valu | es in brackets 4 394 771 | ~~ ~ | | | | * 1 mm less control | - |
| | 113,0-119,0 | 820 | 600 | 102,0-108,0 | 100 | 130,0-170,0 | 300 19,0-25 |

C. Settings for Fuel Injection Pump with Fitted Governor

| | Full-load d | | Breakaway (21 | Fuel de | livery characteristics (5 | Starting | fuel delivery 6 | Low idle speed 5 |
|---|--------------|--------------------------|---------------|------------|-------------------------------|----------|-------------------------------|------------------------|
| | Test oil ten | np. 40°C (104°F) (2) | G | | | switchi | ng point | Control rod travel |
| | rev/min | 1. | rev/min 48 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min mm 8 9 |
| | AC. No | 4 394 773 | | 1 | | 1 | | |
| | | 125,0-131,0 | 820 | 600 | 134,0-140,0 | 100 | 130,0-170,0 | 200 10 0 25 0 |
| | | | 020 | 000 | 134,0-140,0 | 100 | 130,0-1/0,0 | 300 19,0-25,0 |
| | | 4 394 775 192,0-198,0 | 1045 | 000 | 100 0 100 0 | 400 | 420 0 470 0 | 202 42 2 2 2 |
| | | | 1045 | 900 | 180,0-186,0 | 100 | 130,0-1/0,0 | 300 19,0-25,0 |
| | | 4 394 777 200,0-206,0 | 1000 | 000 | 400 0 400 0 | 400 | 400 0 470 0 | ••• |
| | 1000 4 | 200,0-200,0 | 1020 | 800 600 | 180,0-186,0 189,0-195,0 | 100 | 130,0-1/0,0 | 300 19,0-25,0 |
| | AC-Nr. | 4 394 779 | | | | | | |
| | 940 1 | 185,0-195,0 | 955-65 | | | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | AC-Nr. | 4 394 781 | | | | | . , | |
| | | 230,0-236,0 | 1040 | 900 | 207,0-213,0 | 100 | 130.0-170.0 | 300 19,0-25,0 |
| | | 1 | | 700 | 209,0-215,0 | | | ,,. |
| 1 | AC-Nr. | 4 394 783 | | | | | | |
| | 1000 2 | 227,0-233,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| 1 | AC-Nr. | 4 394 785 | | | | | | |
| • | 1000 2 | 235,0-241,0 | 1020 | 700 | 263,0-269,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| 1 | AC-Nr. | 4 394 787 | | | | | | |
| - | 1000 2 | 20,0-226,0 | 1020 | 800 | 209,0-215,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | | | | 600 | 227,0-233,0 | | | |
| | | 4 394 789 | | | | | | |
| , | 910 1 | 90,0 | 930 | | | 100 | 130,-170,0 | 300 25,0 |
| | | 4 394 791 | | | | | | |
| 2 | 900 1 | 60,0-166,0 | 920 | 700 | 139,0-145,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | | 4 394 793 | | | | | | |
| 6 | 500 1 | 24,0-130,0 | 620 | | | 100 | 130,0-170,0 | 300 19,0-25,0 |
| P | C-Nr. | 4 394 795 | | | | | | |
| 7 | '00 1 | 27,0-133,0 | 720 | 600 | 124,0-130,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| A | IC-Nr. | 4 394 797 | | | | | | |
| 8 | 300 1 | 39,0-145,0 | 820 | 600 | 124,0-130,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| A | C-Nr. | 4 394 799 | | | | | | |
| 9 | 25 1 | 57,0-163,0 | 945 | | 145,0-151,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | _ | | | 600 | 134,0-140,0 | | | |
| | | 4 394 801 | 4000 | 000 | 464 0 455 5 | 4.0.5 | | rod travel than col. 2 |
| 1 | 000 1 | 80,0-186,0 | 1020 | | 154,0-160,0 142,0-148,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| | | | | • | | T | estoil-IS | 0 4113 |
| | | | | | | | | |

En

 \odot

estoil-ISO

300 19,0-25,0

130,0-170,0

100

AC-Nr. 4 394 827

234,0-240,0

1050

1070

900

700

246,0-252,0

268,0-274,0

0

| C. Settings for Fu | el Inject | tion Pump with Fitted Governor | |
|--------------------|-----------|---|------|
| Full-toad delivery | Breakaway | Fuel delivery characteristics 5a Starting fuel delivery | @ ro |

| Full-load Control-r Test oil te | | Breakaway | (20) | Fuel deli high idle | very characteristics 5a speed 5b | IIdle | ituel delivery 6 | LOW | dle speed 5 |
|---------------------------------------|--------------------|-----------|-------------|------------------------|-------------------------------------|---------|------------------|------------|-----------------|
| rev/min | cm³/1000 strokes | rev/min | (3) | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | reiv/nai | travel n mm |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 |
| ac-Nr | 4 394 829 | • | , | • | • | • | • | • | • |
| | 262,0-268,0 | 1070 | | 900 | 279,0-285,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 202,0 200,0 | | | 700 | 289,0-295,0 | | | | |
| AC-Nr. | 4 394 831 | | | | | | | | |
| 1050 | 241,0-247,0 | 1070 | | 900 | 265,0-271,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | 700 | 268,0-274,0 | | | | |
| AC-Nr. | 4 394 833 | | | | | | 400 0 470 0 | 200 | 10.0.25 |
| 900 | 232,0-238,0 | 920 | | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 835 | | | | | | | | |
| 750 | 244,0-250,0 | 770 | | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | . 4 394 837 | | | | | | | | |
| 800 | 239,0-245,0 | 820 | | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | . 4 394 839 | | | | | | | | |
| | 212,0-218,0 | 1020 | | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-N> | . 4 394 841 | | | | | | | | |
| 900 | 288,0-294,0 | 920 | | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| | | | | | • | | | | |
| | . 4 394 843 | 1020 | | 800 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 1000 | 255,0-261,0 | 1020 | | 600 | 270,0-276,0 | | | | • |
| AC-Nr | . 4 394 845 | | | | | | | | |
| | 239,0-245,0 | 1070 | | 900 | 233,0-239,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | 700 | 273,0-279,0 | | | | |
| AC-Nr | . 4 394 847 | | | | | | | | _ |
| 1000 | 215,0-221,0 | 1020 | | 800 600 | 197,0-203,0 220,0-226,U | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | 000 | 220,0-220,0 | | | | |
| - | . 4 394 849 | | | 700 | 054 0 060 0 | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 900 | 222,0-228,0 | 920 | | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 | 19,0 % |
| AC-Nr | 4 394 851 | | | | | | 400 0 470 0 | 200 | 07.0.00 |
| 1050 | 257,0-263,0 | 1070 | | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| AC-Nr | . 4 394 853 | | | | • | | | . | 05.5 |
| 1050 | 295,0-303,0 | 1075 | | 900 | 309,0-315,0 | 100 | 130,0-170,0 | 300 | 25,0 |
| AC-Nr | . 4 394 857 | | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | | 900 | 267,0-273,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| Checking v | values in brackets | | | 700 | 267,0-273,0 | | * 1 mm less cont | rol rod ti | ravel than col. |
| | ·. 4 394 861 | | | | | 400 | 400 0 470 0 | 205 | 1 40 0 0 |
| 1050 | 296,0-302,0 | 1070 | | 900 | 301,0-307,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |

0

| C | Settings fo | r Fuei in | iection | Pump with | Fitted | Governor |
|-----|--------------|-----------|----------------|------------------|---------------|----------|
| ••• | COMMITTEE OF | | | | | |

| Full-load deli | | Breakaway (20) | Fuel delin | very characteristics 5a | Starting | fuel delivery 6 | Low id | e speed5 |
|---|-------------------------------|----------------|------------|-------------------------------|----------|---|-----------------------|----------------|
| Control-rod stop Test oil temp. 40°C (104°F) 2 | | | | peed (5b) | switchin | ng point I | Control rot travel | |
| | cm ³ /1000 strokes | rev/min 4a | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | 1 |
| 1 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 4 004 050 | | • | • | • | • | | |
| | 4 394 863 | | | 050 0 050 0 | 400 | 130,0-170,0 | 200 | 10 0-25 (|
| 1050 2 | 53,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 13,0~23, |
| | | | , 00 | 203,0 270,0 | | | | |
| AC-Nr. | 4 394 865 | | | | | | | 40 0 05 |
| 1050 2 | 08,0-214,0 | 1070 | 900 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | | | 700 | 260,0-266,0 | | | | |
| AC-Nr. | 4 394 867 | | | | | | | |
| 900 1 | 81,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-N× | 4 394 869 | | | | | | | |
| | 76,0-182,0 | 945 | 800 | 162,0-168,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 920 I | 70,0-102,0 | 343 | 700 | 177,0-183,0 | , , , | | | • |
| AC No | 4 394 871 | | | | | | | |
| | | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 900 1 | 173,0-179,0 | 920 | 000 | 100,0 100,0 | 100 | 100,0 170,0 | | ,. |
| AC-Nr. | 4 394 873 | | | | | | | |
| 925 2 | 237,0-243,0 | 945 | 800 | 251,0-257,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| | | | 700 | 269,0-275,0 | | | | |
| AC-Nr. | 4 394 875 | | | | | | | |
| 700 2 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| AC-Nr | 4 394 877 | | | | | | | |
| | 213,0-219,0 | 1060-1080 | 900 | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 1050 4 | 213,0-213,0 | 1000 1000 | 700 | 240,0-246,0 | ,,, | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | |
| AC No | 4 394 879 | | | | | | | |
| | | 1055-1075 | 075 | 237,5-247,0 | 100 | 130,0-170,0 | 300 | 19.0-25. |
| 1050 4 | 211,0-220,0 | 1055-1075 | 700 | 258,5-269,5 | 100 | 100,0 170,0 | 400 | ,, |
| | | | 600 | 255,5-266,0 | | | | |
| AC-Nr. | 4 394 881 | | | | | | | |
| | 246,0 | 720 | 600 | 263,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | • | | | - | | | | • |
| | 4 394 883 | 4060 4000 | | 254.5 | 400 | 130,0-170,0 | 200 | 10 1-25 |
| 1050 | 244,5 | 1060-1080 | | 254,5 | 100 | 130,0-1/0,0 | 300 | 13,0723 |
| AC-Nr. | 4 394 885 | | | | | | | |
| 600 | 258,0 | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| VC-N~ | 4 394 891 | | | | | | | |
| | | 620 | | | 100 | 130,0-170,0 | 300 | 25.0 |
| 600 | 167,0-175,0 | U2U | | | | ,,0 | | , - |
| | 4 394 893 Nues in brackets | | | | | * 1 mm less con | | |
| 900 | 259,0-267,0 | 925 | 700 | 238,0-246,0 | 100 | 130,0-170,0 | 300 | 19,0-29 |
| | | | | | | | | |

| Full-load delivery Control-rod stop | _ | Breakaway | ② | Fuel de. high idle | very characteristics (5a) | Idle | fuel delivery 6 | LOW 1 | dle speed 5 |
|--|--------------|-----------|----------|-----------------------|-------------------------------|--------------|---|-------------|---------------------------------|
| Test oil temp. 40° | PC (104°F) 2 | | | | | | ng point | | Control roc travel n j mm |
| 1. | 1000 strokes | rev/min | (49) | rev/min 4 | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/mi 8 | 9 |
| 1 2 | | 3 | | | | | | 1 | 1 |
| C-Nr. 4 3 | 94 895 | | | | | | | | |
| 000 188, | 0-196,0 | 1025 | | 800 | 180,0-187,0 | 100 | 130,0-170,0 | 300 | 25,0 |
| • | | | | | | | | | |
| C-Nr. 4 3 | | 075 | | 750 | 185,0-193,0 | 100 | 130,0-170,0 | 325 | 30,0 |
| 50 189, | 0-197,0 | 875 | | 750 | 105,0-155,0 | .00 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | |
| C-Nr. 4 3 | 94 899 | | | | | | | 200 | 40.0.25 |
| 0001 175, | 0 | 925 | | 700 | 158,0 | 100 | 130,0-170 _, 0 | 300 | 19,0-25, |
| AC-Nr. 4 3 | 94 905 | | | | | | | | |
| | 0-247,0 | 1025 | | 700 | 229,0-235,0 | 100 | 130,0-170,0 | 300 | 25,0 |
| | | | | | | • | | | |
| Nr. 4 3 | | 200 | | 000 | 151,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 000 161, | 0 | 925 | | 800 | 151,0 | 100 | 150,0 170,0 | | ,. |
| NC-Nr. 4 3 | 94 909 | | | | | | | | 40.0.05 |
| 1050 202, | 0-210,5 | 1060-1080 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. 4 3 | 394 911 | | | | | | | | |
| | 5-239,5 | 1010-1030 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| · | | | | | | | | | |
| AC-Nr. 4 3 | | 1010-1030 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 1000 203, | ,0-211,5 | 1010-1036 | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | • |
| AC-Nr. 4 3 | 394 917 | | | | | | | 200 | 40 0 25 |
| 1050 260 | ,5-271,0 | 1060-1080 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. 4 | 394 919 | | | | | | | | |
| 1050 215 | | 1060-1080 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | | | | | | |
| AC-Nr. 4 | | 1060-1080 | 1 | 900 | 267,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 1050 260 | ,5-2/1,0 | 1000-1000 | , | 700 | 267,0-278,0 | | ,. | | - |
| | 004 005 | | | | | | | | |
| AC-Nr. 4 | | 1070 | | 900 | 234,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 1050 244 | , U | 1070 | | 700 | 237,0 | 100 | .00,0 1,0,0 | | |
| AC-Nr. 4 | 394 997 | | | | | | | | 40.0.0 |
| 900 173 | ,0-179,0 | 920 | | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |

Testoil-ISO 4113

Checking values in brackets

En

* 1 mm less control rod travel than col. 2

| BOSCH | TEST SPEC | S. IP ASSEMBLY | TEST SHEET Edition: | 05. 12. | 89 (2) | |
|----------------------------|--------------------|---|----------------------------------|--|---|-----------------|
| Pump: Regulator: | PE 8 P 12 RE 30 | O A 920/4 LS 71 | Type numbe | r: 0 412 62 r: 0 421 89 DENT. NO.: | 0 007 | |
| IP ASSEMBLY | 0 402 698 | | | | | |
| Customer-specific | | 5 5 1 1 1 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | Min | Max |
| Customer: | Scania | | 2020355555555 | | # W # # # # # # # # # # # # # # # # # # | 23£4 £ 3 |
| Engine: Output kW: | DSC 140 347 | 4 | PC mark C | yl. No. | 1 | |
| at 1/min: | 1900 | | Pulse wheel | y1. NO. | • | |
| | | | position | | | |
| | | Min Max | | CS | 0 of C | s CYL1 |
| | ******** | ************* | | /-°CS /-°CS | 0.2 0.5 | |
| TEST PR | EREQU | ISITES | | | | |
| Test oil inlet temperature | °C | 38 42 | Section Actuator test | В - | | |
| o.a.pon o caro | | | - Check values d | enoted by " | P" | |
| Overflow valve | | 1 417 413 025 | - Assembly warm- | up time: 3 | mins. a | t |
| Talah amananna | han | 1 5 | n = 600 1/min, | U/Norm = 2 | .5 V | |
| Inlet pressure | bar | 1.5 | CONTROL-ROD PICK | UP SETTING | | |
| Overflow | 1/h | 100 120 | Test speed | 1/min | 0 | |
| Calibrating noon | 1.0 | | Setting value | | | |
| Calibrating nozz | 16- | 1 688 901 019 | beccing value | | | |
| | | | U/Norm | V | 3.10 | |
| Opening pressure | bar | 207 210 | Control-rod | | 10.05 | 10.05 |
| Dowformand plans | | | travel P Control-rod | mm | 12.95 | 13.05 |
| Perforated plate diameter | mm | 0.8 | travel | mm | 12.90 | 13.10 |
| M | | | Check value | | | |
| Test pressure line | | 1 680 750 015 | Clieck value | | | |
| Dimensions: | | | U/Norm | V | 1.70 | |
| Outer diameter | mm | 6.00 | Control-rod | | 5 00 | c . o |
| x wall thickness | | 1.50 | travel P Control-rod | mm | 5.90 | 6.40 |
| x length | ereeree Div | 600 ******** | | mm | 5.85 | 6.45 |
| | | | | | | |
| TEST SPE | CIFIC | ATIONS | Stop position | | | |
| Section A | A - | | U/Norm | V | min. | |
| Setting values of | f injection | n pump | Control-rod | | | |
| - Check values de | enoted by | n P n | travel | mm | 0.5 | 1.0 |
| - No basic setti | | delivery | P Control-rod travel | | 0.4 | 1.1 |
| setting under | section C | | craver | mm | 0.4 | 1.1 |
| PORT CLOSING | | | SPEED SENSOR SIG | NALS | | |
| PC setting cyl. | | 1 | - Test with cont | rol rod in | stop po | sition |
| Test pressure | bar | 25 27 | | - • • | | |
| Prestroke | | 50 51 | Speed | 1/min | 60 | 2 0 |
| (from BDC) Prestroke | mm | 5.0 5.1 | pos.amplitude P pos.amplitude | v V | 0.8 0.6 | 2.0 |
| (from BDC) | mm | 4,95 5.15 | - pootempriede | • | | |
| Control-rod | | • | Speed | 1/min | 600 | |
| travel | mm | 9.0 12.0 | Difference | | | |
| Cam sequence | | 1 - 2 - 7 - 3 - 4 - 5 - | Amplitude to amplitude | V | max. 1 | . 4 |
| | | 6 - 8 | | • | | - • |
| PC difference | °¢s | 45 each | | | | |
| tolerance | +/-°CS | 0.50 | | Continue | 05 500 | + na~~ |
| tolerance | +/-°CS | 0.75 | | Continued | on nex | r hake |

Section C-

Injection pump with actuator

- Check values denoted by "P"

FUEL DELIVERY TEST AND SETTING

Test point V 1

| Speed U/Norm Fuel delivery P Fuel delivery Dispersion P Dispersion | 1/min V cm3/1000str cm3/1000str cm3/1000str cm3/1000str | 223.0 6.0 | 228.0 231.0 |
|--|--|--------------|----------------|
| Test point L1 | | | |
| Speed U/Norm Fuel delivery P Fuel delivery Dispersion P Dispersion | 1/min V cm3/1000str cm3/1000str cm3/1000str cm3/1000str | 13.0 3.0 | 20.0 |

BOSCH INJECTION PUMP TEST SPECIFICATIONS

Observe notes in remark column

: PEU 2.5 F Test sheet

Date of manufacture :

: 10.12.1991 Edition Replaces : 05.07.1989 Test oil : ISO 4113

: VE4/9E2075 R 190 Injection pump

: 0 460 494 999

Customer Ident. No. :

Customer-specific details Customer : Peugeot

Engine : XD 3 T

KW : 77 Output 1/min : 4150 Speed

TEST BENCH PREREQUISITES

Test oil

return temp. > °C

with thermometer> : 40...48 : 42...50 electronic>

Inlet pressure, bar : 0.30...0.40

Calibrating nozzle-

holder assembly> : 1 688 901 022

Opening

pressure> bar : 130...133

Test pressure line : 1 680 750 073

: 6.00 Outer diameter x wall thickness> : 2.00 x length> mm : 450

Overflow valve : 1 463 456 303

: 1 684 463 218 Test line

(fuel-delivery actuator)

: 1 684 463 221 Test line

(solenoid valve start of injection)

ELECTRICAL TEST

Actuator Connections 4 and 7 Test temperature:

15°...30°C, ohms : 0.4...1.0 50°...70°C, ohms : 0.45...1.1

Connection 4 and

ground, Mohms min.: 1.0

Connection 7 and

ground, Mohms min.: 1.0

Connection 2 and 7

Mohms min. :
Connection 4 and 6

Mohms min.

Control-collar travel sensor Test temperature :

15°...70°C

Connections 2 and 3

: 1.0...3.0 kohms

Connections 1 and 3

: 0.5...2.0 kohms

Connection 1 and

ground, Mohms min.: 1.0

Connection 2 and

ground, Mohms min.: 1.0

Connection 3 and

ground, Mohms min.: 1.0

Temperature sensor, fuel

Connections 5 and 6 Test temperature :

15°...30°C, kohms: 1.2...4.0 50°...70°C, kohms: 0.3...1.2

Connection 5 and

ground, Mohms min.: 1.0

Connection 6 and

ground, Mohms min.: 1.0

Solenoid valve, start of

injection

Connections 1 and 2

Test temperature :

15°...30°C, ohms : 14.3...17.3

50°...70°C, ohms : 15.5...21.0

Setting values of injection pump Check values in brackets Supply pump pressure: 1/min : 1000 Speed Checkbk. volt. mV: 3000 Setting value, bar: 6.0...6.6 Solenoid valve Start of injection, volts: 0 Timing device travel: 1/min : 1000 Checkbk. volt. mV: 3000 Setting value, mm: 8.5...8.9 Solenoid valve Start of injection, volts: 0 Full-load delivery: 1/min : 1500 Speed Checkbk. volt. mV: 2750 Fuel delivery cm3/: 1000str: 37.2...38.2 Solenoid valve Start of injection, volts: 0 Dispersion cm3/: 2.5 1000str: Test specifications of injection pump Check values in brackets Supply pump pressure variations: 1st speed 1/min: 300 Checkbk. volt. mV: 3000 Supply pump bar : 4.8...5.4 pressure > bar : (4.6...5.6) Solenoid valve Start of injection, volts: 0 2nd speed 1/min: 1000 Checkbk. volt. mV: 3000 Supply pump pressure > bar : bar : (5.8...6.8)

Solenoid valve

injection, volts: 0

Start of

Timing device variations: 1st speed 1/min: 100 Checkbk. volt. mV: 4000 Timing device mm: 1.9...4.7 travel mm : (1.6...5.0)Solenoid valve Start of injection, volts: 0 2nd speed 1/min: 1000 Checkbk. volt. mV: 2300 Timing device travel mm: 0.0...0.6 mm : (0.0...0.6)Solenoid valve Start of injection, volts: 12 3rd speed 1/min: 1000 Checkbk. volt. mV: 3000 Timing device travel mm : mm : (8.0...9.4)Solenoid valve Start of injection, volts: 0 4th speed 1/min: 2000 Checkbk. volt. mV : 3000 Timing device travel mm: 12.0...12.6 mm : (11.8...12.8)Solenoid valve Start of injection, volts: 0 Overflow at overflow valve 1st speed 1/min : 2000 Checkbk. volt. mV: 3000 Solenoid valve Start of injection, volts: 0 : 84...168 Overflow > cm3/10: (84...168)

Fuel delivery variations:

1st speed 1/min : 2000 Checkbk. volt. mV : 3000 Solenoid valve Start of injection, volts : 0 Fuel delivery cm3/: 50.5...52.5 1000str: (49.0...54.0) Dispersion cm3/: 2.51000str: (2.5) 2nd speed 1/min : 1500 Checkbk. volt. mV : 2750 Solenoid valve Start of injection, volts : 0 Fuel delivery cm3/: 1000str: (35.7...39.7) Dispersion cm3/: 1000str: (2.5) 3rd speed 1/min : 1500 Checkbk. volt. mV : 2000 Solenoid valve Start of injection, volts : 0 Fuel delivery cm3/: 8.9...10.9 > 1000str: (7.4...12.4) 4th speed 1/min: 500 Checkbk. volt. mV: 3000 Solenoid valve Start of injection, volts : 0 Fuel delivery cm3/: 36.2...38.2 1000str: (34.7...42.7)

Idle delivery:

min.> volts

Rated voltage,

Speed 1/min : 375 Checkbk. volt. mV: 2500 Fuel delivery cm3/: > 1000str: (6.1...14.1) Solenoid valve Start of injection, volts : 12 Dispersion cm3/: 1000str: (2.5) Starting fuel delivery: Speed 1/min : 100 Checkbk. volt. mV: 4000 Fuel delivery min.: cm3/1000str: 45.0 > Solenoid valve Start of injection, volts : 12 Stop test: 1/min : 2075 Speed Checkbk. volt. mV: 3000 volts: 0 ELAB, Fuel delivery cm3/: 1000str: 4.0 Shutoff solenoid: Cut-in voltage

: 10.0

volts: 12.0

BOSCH INJECTION PUMP TEST SPECIFICATIONS

Observe notes in remark column

: CIT 2.5 A Test sheet

Date of manufacture :

: 10.12.1991 Edition Replaces : 05.07.1989 Test oil : ISO 4113

Injection pump : VE4/9E2075 R 220

Type No. : 0 460 494 998

Customer Ident. No. :

Customer-specific details

Customer : Citroen

: M 25-671 Engine

KW : 78 Output Speed 1/min : 4150

TEST BENCH PREREQUISITES

Test oil

return temp. > °C

with thermometer> : 40...48 electronic> : 42...50

Inlet pressure, bar: 0.30...0.40

Calibrating nozzle-

holder assembly> : 1 688 901 022

Opening

bar : 130...133 pressure>

Test pressure line : 1 680 750 073

Outer diameter : 6.00 x wall thickness> : 2.00 : 450 x length> mm

Overflow valve : 1 463 456 303

Test line : 1 684 463 218

(fuel-delivery actuator)

: 1 684 463 221 Test line

(solenoid valve start of injection)

Port closing

: 0.5 Prestroke mm (from BDC): +-0.02

ELECTRICAL TEST

Actuator Connections 4 and 7 Test temperature:

15°...30°C, ohms : 0.4...1.0 50°...70°C, ohms : 0.45...1.1

Connection 4 and

ground, Mohms min.: 1.0 Connection 7 and

ground, Mohms min.: 1.0

Connection 2 and 7

Mohms min.

Connection 4 and 6

Mohms min.

Control-collar travel sensor

Test temperature : 15°...70°C

Connections 2 and 3

kohms : 1.0...3.0

Connections 1 and 3

kohms : 0.5...2.0

Connection 1 and

ground, Mohms min.: 1.0

Connection 2 and

ground, Mohms min.: 1.0 Connection 3 and

ground, Mohms min.: 1.0

Temperature sensor, fuel

Connections 5 and 6

Test temperature :

15°...30°C, kohms: 1.2...4.0 50°...70°C, kohms: 0.3...1.2

Connection 5 and

ground, Mohms min.: 1.0

Connection 6 and

ground, Mohms min.: 1.0

Solenoid valve, start of

injection

Connections 1 and 2

Test temperature :

15°...30°C, ohms : 14.3...17.3

50°...70°C. ohms : 15.5...21.0

Setting values of injection pump Check values in brackets Supply pump pressure: 1/min : 1000 Checkbk. volt. mV: 3000 Setting value, bar: 6.0...6.6 Solenoid valve Start of injection, volts: 0 Timing device travel: 1/min : 1000 Checkbk. volt. mV: 3000 Setting value, mm: 8.6...9.0 Solenoid valve Start of injection, volts: 0 Full-load delivery: 1/min : 1500 Checkbk. volt. mV: 2750 Fuel delivery cm3/: 1000str: 37.3...38.3 Solenoid valve Start of injection, volts: 0 Dispersion cm3/: 2.5 1000str: Test specifications of injection pump Check values in brackets Supply pump pressure variations: 1st speed 1/min: 300 Checkbk. volt. mV : 3000 Supply pump bar: 4.8...5.4 pressure > bar : (4.6...5.6) Solenoid valve Start of injection, volts: 0 2nd speed 1/min: 1000 Checkbk. volt. mV: 3000 Supply pump pressure > bar : bar : (5.8...6.8) Solenoid valve

Start of

injection, volts: 0

Timing device variations: 1/min : 100 1st speed Checkbk. volt. mV : 4000 Timing device mm : 2.2...5.0 travel mm : (1.9...5.3)Solenoid valve Start of injection, volts: 0 2nd speed 1/min: 1000 Checkbk. volt. mV : 2300 Timing device travel mm : 0.0...0.6mm : (0.0...0.6)Solenoid valve Start of injection, volts: 12 3rd speed 1/min: 1000 Checkbk. volt. mV: 3000 Timing device travel mm : mm : (8.1...9.5)Solenoid valve Start of injection, volts: 0 4th speed 1/min: 2000 Checkbk. volt. mV: 3000 Timing device mm : 12.0...12.6travel mm : (11.8...12.8)Solenoid valve Start of injection, volts: 0 Overflow at overflow valve 1/min : 2000 1st speed Checkbk. volt. mV : 3000 Solenoid valve Start of injection, volts: 0 Overflow : 84...168 > cm3/10: (84...168)

Fuel delivery variations:

1st speed 1/min : 2000 Checkbk. volt. mV: 3000 Solenoid valve Start of injection, volts : 0 Fuel delivery cm3/: 50.8...52.8 1000str: (49.3...54.3) cm3/: 2.5 Dispersion 1000str: (2.5) > 2nd speed 1/min : 1500 Checkbk. volt. mV: 2750 Solenoid valve Start of injection, volts : 0 Fuel delivery cm3/: 1000str: (37.0...38.6) Dispersion cm3/: 1000str: (2.5) 1/min: 1500 3rd speed Checkbk. volt. mV : 2000 Solenoid valve Start of injection, volts : 0 Fuel delivery cm3/: 10.5...12.5 1000str: (10.0...13.0) 4th speed 1/min: 500 Checkbk. volt. mV: 3000 Solenoid valve Start of injection, volts : 0 Fuel delivery cm3/: 38.0...40.0 1000str: (37.5...40.5)

Idle delivery:

Starting fuel delivery:

Speed 1/min: 100
Checkbk. volt. mV: 4000
Fuel delivery min:

> cm3/1000str: 45.0
Solenoid valve
Start of
injection, volts: 12

Stop test:

Speed 1/min: 2075 Checkbk. volt. mV: 3000 ELAB, volts: 0 Fuel delivery cm3/: max. 1000str: 5.0

Shutoff solenoid:

Cut-in voltage min.> volts : 10.0 Rated voltage, volts: 12.0

Dimensions for mounting and setting:

Description
K mm :
KF mm : 5.4...5.7
SVS max. mm :

BOSCH INJECTION PUMP TEST SPECIFICATIONS

Observe notes in remark column

Test sheet : BMW 2.4 G

Date of manufacture :

Edition : 10.12.1991
Replaces : 05.07.1989
Test oil : 180 4113

Injection pump : VE6/10E2400 R 260

Type No. : 0 460 406 998

Customer Ident. No. :

Customer-specific details Customer : BMW

Engine : M 21 D 24 WA

Output KW : 85 Speed 1/min : 4800

TEST BENCH PREREQUISITES

Test oil

return temp. > °C

with thermometer> : 40...48 electronic> : 42...50

Inlet pressure, bar: 0.30...0.40

Calibrating nozzle-

holder assembly> : 1 688 901 022

Opening

pressure> bar : 130...133

Test pressure line : 1 680 750 073

Outer diameter : 6.00 x wall thickness> : 2.00 x length> mm : 450

Overflow valve : 1 463 456 303

Test line : 1 684 463 219

(fuel-delivery actuator)

Test line : 1 684 463 220

(solenoid valve start of injection)

Port closing

Prestroke mm : 0.5 > (from BDC): +-0.02

ELECTRICAL TEST

Actuator
Connections 4 and 7

Test temperature:

15°...30°C, ohms : 0.4...1.0 50°...70°C, ohms : 0.45...1.1

Connection 4 and

ground, Mohms min.: 1.0

Connection 7 and

ground, Mohms min.: 1.0

Connection 2 and 7

Mohms min. : 1.0

Connection 4 and 6

Mohms min. : 1.0

Control-collar travel sensor

Test temperature : 15°...70°C

Connections 2 and 3

kohms : 1.0...3.0

Connections 1 and 3

kohms : 0.5...2.0

Connection 1 and

ground, Mohms min.: 1.0

Connection 2 and

ground, Mohms min.: 1.0

Connection 3 and

ground, Mohms min.: 1.0

Temperature sensor, fuel

Connections 5 and 6

Test temperature :

15°...30°C, kohms : 1.2...4.0 50°...70°C, kohms : 0.3...1.2

50°.../0°C, KOIMIS : 0.5...1.2

Connection 5 and

ground, Mohms min.: 1.0

Connection 6 and

ground, Mohms min.: 1.0

Solenoid valve, start of

injection

Connections 1 and 2

Test temperature :

15°...30°C, ohms : 14.3...17.3

50°...70°C, ohms : 15.5...21.0

Starting stop mV:

max. mv : 4120...4650

Shutoff stop mV: 650...850

Setting values of injection pump Timing device variations: Check values in brackets 1st speed 1/min: 150 Checkbk. volt. mV: 3680 Supply pump pressure: Timing device travel mm : 1.6...4.4Speed 1/min : 1500 Checkbk. volt. mV: 3520
Setting value, bar: 6.4...7.0
Solenoid valve mm: (1.3...4.7)Solenoid valve Start of injection, volts : 0
2nd speed 1/min : 400 Start of injection, volts: 0 Checkbk. volt. mV : 3680 Timing device Timing device travel: travel mm: 4.5...5.9 mm : (4.2...6.2)1/min : 1500 Speed Solenoid valve Checkbk. volt. mV: 3520 Setting value, mm: 7.0...7.4 Start of injection, volts : 0
3rd speed 1/min : 1 Solenoid valve 1/min : 1500 Start of Checkbk. volt. mV: 3520 injection, volts: 0 Timing device Full-load delivery: travel mm: mm : (6.5...7.9)Solenoid valve 1/min : 1500 Speed Checkbk. volt. mV: 2600 Start of injection, volts : 0
4th speed 1/min : 1500 Fuel delivery cm3/: 1000str: 24.0...25.0 Solenoid valve Checkbk. volt. mV : 3520 Timing device Start of mm : 0.0...0.2volts: 0 injection, travel Dispersion cm3/: 2.0mm : (0.0...0.2)Solenoid valve 1000str: Start of Test specifications of injection pump Check values in brackets Checkbk. volt. mV: 2970 Timing device Supply pump pressure variations: mm: 8.7...9.3 travel 1/min : 400 mn: (8.5...9.5)1st speed Solenoid valve Checkbk. volt. mV: 3680 Start of Supply pump pressure > injection, volts: 0 bar: 4.9...5.5 bar: (4.7...5.7) Overflow at overflow valve Solenoid valve Start of injection, volts: 0 1st speed 1/min: 500 Checkbk. volt. mV : 3100 1/min : 1500 2nd speed Checkbk. volt. mV: 3520 Solenoid valve Start of Supply pump injection, volts: 0 pressure > bar : bar : (6.2...7.2) Overflow > cm3/10: (50...75)Solenoid valve 2nd speed 1/min : 2400 Start of Checkbk. volt. mV: 2970 injection, volts: 0 Solenoid valve 3rd speed 1/min : 2400 Checkbk. volt. mV: 2970 Start of injection, volts : 0 Supply pump Overflow pressure > bar: 8.0...8.8 cm3/10: (77...117) bar : (7.9...8.9) Solenoid valve Start of

: 55...70

: 82...112

injection, volts: 0

| tuer derive | ery varia | cions: |
|------------------------------|------------------|---|
| | 1/ | 2400 |
| ist speed | 1/HIII : | 2070 |
| Checkbk. ve | | 2970 |
| Solenoid v | arve | |
| Start of | | 0 |
| injection, | AOTES : | 30 6 43 6 |
| Luci della | TOOOS+++ | 39.641.6 (38.143.1) |
| | | 2.5 |
| Dispersion | 1000at# | (2.5) |
| > 2nd speed Checkbk. v | 1/00811: | 1500 |
| Choolehle | : 11±111 1 | 3000 |
| Solenoid v | 31t, mv : | 3000 |
| | arve | |
| Start of injection, | ******* | 0 |
| Fuel delive | AOICS : | 37 6 30 6 |
| Luci delin | 1000ct+. | (26 2 |
|) Diamamaian | 10005tI: | 2.0 |
| Disheratou | 10000+++ | 37.639.6 (36.341.3) 2.0 (2.0) |
| 3rd speed | 1/min . | 1500 |
| Charleble w | · 114111 4 6 | 2600 |
| Checkbk. vo Solenoid vo | oleo | 2000 |
| Start of | arve | |
| | | 0 |
| injection, | VOILS : | 0 |
| Fuel delive | 1000c+=+ | (22.526.5) |
| > Diamamaian | 1000811: | 2.0 |
| Dispersion | 10000 | (2.0) |
| > 4th speed | 1000861: | 1000 |
| Checkbk. v | 1/111111 | 3140 |
| | | 3140 |
| Solenoid ve | arve | |
| Start of | • • • | • |
| injection, | volts: | 0 |
| | ery cm3/: | 36.338.3 |
| > > | TOOUSTE: | (34.839.8) 2.0 |
| Dispersion | cm3/: | 42.0 |
| > 545 | 1000str: | (2.0) |
| 5th speed Checkbk. vo | 1/1111111 | 1000 |
| Checkbk. Vo | olt. mv : | 2400 |
| Solenoid va | arve | |
| Start of | | • |
| injection, | volts : | |
| | | 9.911.9 |
| > . | | (8.613.2) |
| Dispersion | cm3/: | 2.0 |
| > 6th speed | 1000str: | (2.0) |
| 6th speed | l/min : | 500 |
| Checkbk, vo | olt. mV : | 3100 |
| Solenoid va | itve | |
| Start of | • . | ٥ |
| injection, | volts : | V |
| | ery cm3/: | 23.525.5 |
| > . | | (22.027.0) |
| Dispersion | | |
| > | 1000str: | (2.0) |
| 7415 4514.ee | | |
| Idle delive | ry: | |
| Speed | 1/min : | 400 |
| Checkbk. vo | olt. mV : | 2770 |
| Fuel delive | ery cm3/. | -··• |
| > | 1000str. | (7.512.5) |
| Solenoid va | | (· · · · · · · · · · · · · · · · · · · |
| Start of | | |
| injection, | volts . | 12 |
| Dispersion | | |
| > > | 1000str: | (2.0) |
| - | | \ |

Starting fuel delivery: 1/min : 100 Speed Checkbk. volt. mV : 3680 Fuel delivery min.: cm3/1000str: 24.0 Solenoid valve Start of injection, volts : 12 Stop test: 1/min : 2400 Speed Checkbk. volt. mV : 2970 ELAB, volts: 0 Fuel delivery cm3/: 1000str: 5.0 max. Shutoff solenoid: Cut-in voltage min.> volts : 10.0 Rated voltage, volts: 12.0 Dimensions for mounting and setting: Description K mm KF : 5.9...6.2 $\mathbf{m}\mathbf{m}$ SVS max. mmFH mm

BOSCH INJECTION PUMP TEST SPECIFICATIONS

Observe notes in remark column

: BMW 2.4 G 1 Test sheet

Date of manufacture :

Edition : 10.12.1991 Replaces : 05.07.1989 Test oil : ISO 4113

: VE6/10E2400 R 260-1 Injection pump

: 0 460 406 997 Type No.

Customer Ident. No. :

Customer-specific details Customer

Engine : M 21 D 24 WA

Output KW : 85 1/min : 4800 Speed

TEST BENCH PREREQUISITES

Test oil

return temp. > °C

with thermometer> : 40...48 electronic> : 42...50

Inlet pressure, bar: 0.30...0.40

Calibrating nozzle-

holder assembly> : 1 688 901 022

Opening

bar : 130...133 pressure>

Test pressure line : 1 680 750 073

Outer diameter : 6.00 x wall thickness> : 2.00 : 450 x length> шп

Overflow valve : 1 463 456 303

: 1 684 463 217 Test line

(fuel-delivery actuator)

: 1 684 463 221 Test line

(solenoid valve start of injection)

Port closing

mm : 0.5 Prestroke (from BDC): +-0.02 ELECTRICAL TEST

Actuator Connections 4 and 7 Test temperature:

15°...30°C, ohms : 0.4...1.0 50°...70°C, ohms : 0.45...1.1

Connection 4 and

ground, Mohms min.: 1.0

Connection 7 and

ground, Mohms min.: 1.0

Connection 2 and 7

Mohms min.

Connection 4 and 6

Mohms min. : 1.0

Control-collar travel sensor

Test temperature : 15°...70°C

Connections 2 and 3

: 1.0...3.0 kohms

Connections 1 and 3

kohms : 0.5...2.0

Connection 1 and

ground, Mohms min.: 1.0

Connection 2 and

ground, Mohms min.: 1.0

Connection 3 and

ground, Mohms min.: 1.0

Temperature sensor, fuel

Connections 5 and 6

Test temperature :

15°...30°C, kohms : 1.2...4.0 50°...70°C, kohms : 0.3...1.2

Connection 5 and

ground, Mohms min.: 1.0

Connection 6 and

ground, Mohms min.: 1.0

Solenoid valve, start of

injection

Connections 1 and 2

Test temperature :

15°...30°C, ohms : 14.3...17.3 50°...70°C, ohms : 15.5...21.0

Starting stop mV : 4120...4650

Shutoff stop mV : 650...850

Setting values of injection pump Check values in brackets Supply pump pressure: 1/min : 1500 Checkbk. volt. mV: 3520 Setting value, bar: 6.4...7.0 Solenoid valve Start of injection, volts: 0 Timing device travel: 1/min : 1500 Checkbk. volt. mV : 3520 Setting value, mm: 7.0...7.4 Solenoid valve Start of injection, volts: 0 Full-load delivery: 1/min : 1500 Checkbk. volt. mV : 2600 Fuel delivery cm3/: 1000str: 25,6...26,0 Solenoid valve Start of injection, volts: 0 cm3/: 2.0Dispersion 1000str: Test specifications of injection pump Check values in brackets Supply pump pressure variations: 1st speed 1/min : 400 Checkbk. volt. mV: 3680 Supply pump pressure > bar : 4.9...5.5 bar: (4.7...5.7) Solenoid valve Start of injection, volts : 0
2nd speed 1/min : 1500 Checkbk. volt. mV: 3520 Supply pump pressure > bar: bar : (6.2...7.2)Solenoid valve Start of injection, volts: 0 3rd speed l/min: 2400 Checkbk. volt. mV: 2970 Supply pump bar : 8.0...8.8 pressure > bar : (7.9...8.9) Solenoid valve Start of

injection, volts: 0

Timing device variations: 1st speed 1/min: 150 Checkbk. volt. mV: 3680 Timing device travel mm: mm : (1.3...4.7)Solenoid valve Start of injection, volts : 0
2nd speed 1/min : 400 Checkbk. volt. mV : 3680 Timing device travel mm: 4.5...5.9 mm = (4.2...6.2)Solenoid valve Start of injection, volts: 0 3rd speed 1/min: 1500 3rd speed Checkbk. volt. mV: 3520 Timing device travel mm: mm: (6.5...7.9) Solenoid valve Start of injection, volts : 0
4th speed 1/min : 1500 Checkbk. volt. mV: 3520 Timing device mm : 0.0...0.2travel mm : (0.0...0.2)Solenoid valve Start of injection, volts: 12 5th speed 1/min: 2400 Checkbk. volt. mV: 2970 Timing device travel mm: 8.7...9.3 mm : (8.5...9.5)Solenoid valve Start of injection, volts: 0 Overflow at overflow valve 1/min : 500 1st speed Checkbk. volt. mV: 3100 Solenoid valve Start of injection, volts: 0 Overflow : 55...70 cm3/10: (50...75) 1/min : 2400 2nd speed Checkbk. volt. mV: 2970 Solenoid valve Start of injection, volts: 0 : 82...112 Overflow > cm3/10: (77...117)

| Fuel delivery varia | tions: |
|---------------------------------------|------------|
| | |
| 1st speed 1/min: | |
| Checkbk. volt. mV: Solenoid valve | |
| Start of | 2970 |
| injection, volts : | 0 |
| Fuel delivery cm3/: | _ |
| > 1000str: | |
| Dispersion cm3/: | |
| > 1000str: | |
| 2nd speed 1/min: | 1500 |
| Checkbk. volt. mV: | |
| Solenoid valve | 3000 |
| Start of | |
| injection, volts : | |
| Fuel delivery cm3/: | |
| > 1000str: | |
| Dispersion cm3/: | |
| > 1000str: | |
| 3rd speed 1/min : Checkbk. volt. mV : | |
| Solenoid valve | 2600 |
| Start of | 2000 |
| injection, volts : | 0 |
| Fuel delivery cm3/: | |
| > 1000str: | |
| Dispersion cm3/: | |
| > 1000str: | |
| 4th speed 1/min: | 1000 |
| Checkbk. volt. mV : | |
| Solenoid valve | 3140 |
| Start of | ^ |
| injection, volts : | 0 |
| Fuel delivery cm3/: | (37,842,8) |
| > 1000str: Dispersion cm3/: | |
| Dispersion cm3/: > 1000str: | /\ |
| 5th speed 1/min : | |
| Checkbk. volt. mV : | |
| Solenoid valve | 2400 |
| Start of | |
| injection, volts : | |
| Fuel delivery cm3/: | 11,012.6 |
| > 1000str: | (9,514,1) |
| Dispersion cm3/: | |
| > 1000str: | <i></i> |
| 6th speed 1/min: | |
| Checkbk. volt. mV : | 3000 |
| Solenoid valve | 5000 |
| Start of | 0 |
| injection, volts : | V |
| Fuel delivery cm3/: > 1000str: | (25.229.2) |
| 7th speed 1/min: | 500 |
| Checkbk. volt. mV: | 700 |
| Solenoid valve | 3100 |
| Start of | |
| injection, volts : | 0 |
| Fuel delivery cm3/: | 26,928,9 |
| > 1000str: | (25,430,4) |
| Dispersion cm3/: | 2,0 |
| > 1000str: | (2.0) |

1000str: (2,0)

```
Idle delivery:
Speed
            1/min : 400
Checkbk. volt. mV: 2770
Fuel delivery cm3/:
           1000str: (7,7...12.7)
Solenoid valve
Start of
injection, volts : 12
Dispersion cm3/:
           1000str: (2.0)
Starting fuel delivery:
Speed
            1/min : 100
Checkbk. volt. mV : 3680
Fuel delivery min.:
       cm3/1000str: 26.0
Solenoid valve
Start of
injection, volts : 12
Stop test:
Speed
            1/min : 2400
Checkbk. volt. mV : 2970
ELAB,
           volts: 0
Fuel delivery cm3/:
           1000str: 3.0
max.
Shutoff solenoid:
Cut-in voltage
min.> volts
                   : 10.0
Rated voltage,
             volts: 12.0
Dimensions for mounting and
setting:
Description
K
             mm
KF
                  : 5.9...6.2
             \mathbf{m}\mathbf{n}
SVS max.
             mm
                   :
FH
             mm
```

:

Testoil-ISO 4113

Test Specifications Fuel Injection Pumps 1 and Governors

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

WPP 001/4 MAC 11.0 k

1. Edition

PES 6 P 110 A 720 RS3024

RQV 300/600-1050 PA342KR PA344KR

supersedes

PES 6 P 110 A720/3RS3036

RQV 300/600-1050 PA365KR

company engine

PA366KR

Mack ETA 676 B (306 PS)

 $PLE-Ma\beta = 0.740"-0.820"$

** Values only apply to test nozzleand-holder assembly 0 681 343 009

A. Fuel Injection Pump Settings

and fuel-injection test tubing 1 680 750 015

mm (from BDC)

| Rotational speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|--------------------------|----------------------------------|--|---|----------------------------------|--|--|
| 1000 | 14,3+0,1 | 22,1-22,3 | 0,4 | | | |
| 300 | 5,0-5,2 | 1,2-2,3 | 0,4 | | | |
| | | | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rated | speed | | | Intermediate | rated sp | ed | Lower rated | speed | Sliding s | leeve travel | |
|----------------------|------------------------------|------------------------------------|-----------|----------------------|----------|-----------------------|----------------------|-------------------|--|---------------------------|--|
| Degree of deflection | | Control rod (travel | 1a | Degree of deflection | | Control rod travel | Degree of deflection | | Control rod travel | | 0 |
| of control lever | rod travel | rev/min (| (2a) | of control lever | rev/min | mm (4) | of control | rev/min | mm (3) | rev/min | mm |
| 1 | 2 | 3 | _ | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| ca.68 | 1070 1150 1200 1280 | 15,5-18, 6,0-11, 0 - 6, 0 | 0 | - | - | - | ca.19 | 300 400 580 | 9,8-11,3 7,5- 8,5 2,5- 5,0 2,5- 5,0 0,8- 2,0 | 300 400 900 1070 | 0,6-1,8 -600 = 3,1-3,6 5,8-6,2 8,2 |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load of Control-ro Test oil ter | | | | | characteristics (5a) Starting fuel delivery ldle switching point | | | control 5 |
|--|----------------------------|------------|--|--|--|---|----------------------------------|--------------------------------------|
| rev/min | cm³/1000 strokes rev/min 3 | | rev/min | rev/min cm³/1000 strokes | | cm³/1000 strokes | rev/min | travel mm 9 |
| LDA 1000 | 1,7 bar 221,0-223,0 | 1090-1100* | LDA 800 500 LDA 600 300 | 1,7 bar 223,5-226,5 235,5-238,5 0 bar 143,0-146,0 114 -122 (PLE) | 300 | ca.11,5mmRW ca. 5 mmRW rsion max. 4 | 1050 900 700 600 500 | 14,4 14,4 14,7 15,2 14,9 |

Checking values in brackets

* 1 mm less control rod travel than col 2

3.83

Test Specifications Fuel Injection Pumps ① and Governors

WPP 001/4 VOL 12,0 c 1
1. Edition

_En

PE 6 P 120 A 320 RS 3032 Z RQV 250-1100 PA 355/2R Testing with T nozzles and fuel lines 8x2x1000 according

supersedes

7.79 Volvo

company:

TD 120 C

** In the case of greater dispersion alter the delivery-valve spring pre-tension accordingly.

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

| Port closing at pres | troke | (2-55-2-75) | mm (from BDC) | | Cyl. 6 | |
|----------------------|-----------------------|-----------------------------------|---------------------------------|-----------------------|----------------------|--|
| Rotational speed | Control rod travel | Fuel delivery | Difference cm ³ / | Control rod travel | Fuel delivery | Spring pre-tensioning (torque-control valve) |
| rev/min 1 | mm 2 | cm ³ /100 strokes 3 | 100 strokes | mm 2 | cm³/100 strokes 3 | mm 6 |
| 700 | 13,0-13,1 | 24,5-24,9 | 0,5(0,9) | | | 25±0,1 ** |
| 250 | 5,2-5,5 | 0,9-1,3 | 0,5(0,8) | | | (max. 2,2-2,9) |
| 700 | - | C, 4-5 | 0,7(1,1) | | | |
| | | | | ł | 1 | 1 |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rated | speed | | Intermediate | Intermediate rated speed | | | speed | Sliding sleeve travel | | |
|---------------------------------------|--|------------------------------------|---------------------------------------|--------------------------|-----------------------|---------------------------------------|------------|-----------------------|---------|--------------------|
| Degree of deflection of control lever | rev/min Control rod travel mm | Control rod travel mm rev/min (28) | Degree of deflection of control lever | rev/min | Control rod travel | Degree of deflection of control lever | rev/min | Control rod travel | rev/min | mm (1) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| ca.50 | 1100 1350 | 15,2-17,8 0 - 1,0 | | | | ca.12 | 100 250 | mind.7,0 5,3-5,5 | | 1,4-2,0 3,7-4,0 |
| ca.47 | 12,0 | 1140-1150 1235-1265 | | | | | 310- | 370 = 2,0 | 1170 | 8,3 |
| | | | | | | 3 | | | | |

Torque control travel a =

mл

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load d Control-ro Test oil ter | | limitation intermediate speed | high idle s | rery characteristics (56) | idle | fuel delivery 6 | Torque- travel | Control rod |
|---|---|-------------------------------|-------------|---------------------------------------|---------|-------------------------------|-------------------|--------------|
| rev/min | cm³/1000 strokes | rev/min 4a | rev/min | cm ³ /1000 strokes | rev/mis | cm ² /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| LDA 700 | 0,9 bar 245,0-249,0 (242,0-252,0) | | LDA 700 | 0 bar 148,0-152,0 (145.0-155,0) | 250 | | | |

Checking values in brackets

* 1 mm less control rod travel than cct. 2

D. Adjustment Test for Manifold Pressure Compensator

VOL 12,0 c 1 -2-

Test at n =

500

rev/min decreasing pressure - in bar gauge pressure

| Pump/governor | Setting Gauge pressure = bar | Measurement Gauge pressure = bar | diminution Control rod travel- difference mm (1) |
|--------------------|------------------------------|-----------------------------------|--|
| 3032 Z with 355/2R | 0,66 | 0,14 | 12,1 - 12,2 9,3 - 9,7 |
| | | | |

Notes:

(1) when n =

rev/min and gauge pressure =

bar (= maximum full-load control rod travel)

Test Specifications Fuel Injection Pumps ① and Governors

WPP 001/4 3. Edition

PES 6 MW 100/320 RS 1016 Komb.-Nr. 0 403 446 117

RQV 300-1400 MW 25

supersedes company:

2.81 RVI

 $1-5-3-6-2-4 = 0-60-120-180-240-300 \pm 0,50^{\circ} (0,75)$

engine:

MIDR 06.02-12

Port closing mark 10,5° after port closing cylinder 1

125 kW (170 PS)

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel injection Pump Settings

Port closing at prestroke

mm (from BDC)

RW 9,0-12,0 mm

| Rotation#J speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|--------------------------|----------------------------------|--|---|----------------------------------|--|---|
| 1400 | 11,1+0,1 | 9,0 - 9,2 | 0,35(0,6) | | | |
| 300 900 500 | 6,3-6,5 | 0,95 - 1,35 | 0,35(0,55 0,5 (0,7) 0,35(0,6) | | | |

Adjust the fuel delivery from each outlet according to the values in [

B. Governor Settings

| Upper rated | speed | | Intermediate | e rated sp | ଓ ଟର | Lower rated | speed | | Stidion | leeve travel |
|---------------------------------------|--|----------------------------|--|--------------|-------------------------------|---------------------------------------|--------------------|--------------------------------|---------|--------------|
| Degree of deflection of control lever | rev/min Control rod travel mm | Control rod travel mm (28) | Degree of deflection of control lever | rev/min 5 | Control rod travel mm 4 | Degree of deflection of control lever | rev/min 8 | Control rod travel mm 3 | rev/min | mm 11 |
| ca.68 | 1400 1700 | 15,2-17,8 0 - 1,0 | | | | ca.13 | 100 300 490- | min.8,0 6,3-6,5 550 =2,0 | | |
| ca.64 | 10,1 | 1440-1450 1540-1570 | | : | | 3a | | | | |

Torque control travel a =

C. Settings for Fuel injection Pump with Fitted Governor

| Full-load d Control-roo Test oil ten | | Rotational-speed 2b imitation intermediate speed | I the term of the | | Starting idle switching | . • | Torque- travel | control 5 | |
|--|--------------------------------------|--|---|---|-------------------------------|-------------------------------------|-------------------|--------------|--|
| rev/min | cm³/1000 strokes | m³/1000 strokes · rev/min | | cm³/1000 strokes | rev/min | cm ² /1000 strokes | rev/min | travei mm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| LDA 1400 | 0,67 bar 90,0-92,0 (88,0-94,0) | 1440-1450* | LDA 900 LDA 500 | 0,67 bar 86,5-90,5 (84,5-92,5) 0 bar 61,0-63,0 (58,0-66,0) | 100 300 | min.100,0 9,5-13,5 (7,0-16,0) | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

Test Specifications Fuel Injection Pumps 1 and Governors

WPP 001/4 MAC 11,0 \times 6

1. Edition

US-PES 6 P 110 A 720 RS 5006 US-RQV 300/600-1050 PA621-7K supersedes Komb.-Nr. 9 400 231 171

PLE-MaB = 0.740" - 0.820"

company:

MACK

Note VDT-I-MAC 002!

Values only apply to test nozzle-and-holder assembly 0 681 343 009

En

EME 6 - 250 250 PS

and fuel-injection test tubing

1 680 750 015

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

mm (from BDC)

| Rotational speed rev/min | Control rod travel :mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|--------------------------|-----------------------------------|---|---|----------------------------------|--|--|
| 1050 | 11,7+0,1 | 17,7-17,9 | 0,4 | | | |
| 300 | 5,2-5,4 | 2,4 - 3,0 | 0,4 | | | |
| | | | | } | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rated s | speed rev/min | Control rod | \sim | | | | | Lower rated speed | | | Sliding s | leeve travel |
|---------------|--------------------|--------------------------------|--------------|-----------------------|--------------|--------------|---|---|--------------|--------------------------------|---------------|--------------|
| deflection | Control rod travel | travel | (1a) (2a) | deflection of control | rev/min 5 | travel mm | 4 | Degree of deflection of control lever 7 | rev/min 8 | Control rod travel mm 3 | rev/min 1ປ | mm 11 |
| max. | 1120 | 15,2-17, | 8 | - | - | | - | ca.20 | 250 | 9,8-11,3 | - | - |
| ca.61 | | 1090-110 1165-119 0 - 1, | 95 | | | | | 3 a | | 7,9-8,1 3,8-5,2 750 =2,0 | | |

Torque control travel a =

mm

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-ros Test oil ten | | Rotational-speed 2b limitation intermediate speed | Fuel deli- high idle s | very characteristics 5a | Starting idle switchir | | Torque- travel | Control rod |
|---|------------------|---|---------------------------|-------------------------------|------------------------------|-------------------------------|-------------------|--------------|
| rev/min | cm³/1000 strokes | rev/min 4a | rev/min | cm ³ /1000 strokes | ten/wiu | cm ³ /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1050 | 176,5-178,5 | 1090-1100* | 850 | 184,0-188,0 | 100 | 120,0-180,0 | 1050 1000 | |
| | | | 630 | 202,0-206,0 | | | 850 | |
| | | | • | PLE | | | 750 | 12,2+0,1 |
| | | | 800 | 121,0-129,0 | | | 630 | 12,8+0,1 |
| | | | | | | | 500 | 12,1+0,1 |

Checking values in brackets

* 1 mm less control rod travel than cot. 2

Test Specifications Fuel Injection Pumps 1 and Governors

WPP 001/4 SCA 11.0 r 2

2. Edition

PE 6 P 110 A 720 RS 3040

ROV 250-1050 PA 379

11.79

company:

Scania DS 11

engine In the case of greater dispersion alter the delivery-valve spring pre-tension accordingly.

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Cy1. 6

| ort closing at prestroke | | (3,25-3,45) | mm (from BDC) | | | | | | |
|--------------------------|----------------------------------|--|---|----------------------------------|---|---|--|--|--|
| Rotational speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 | | | |
| 1050 | 13,4-13,5 | 16,6 - 16,8 | 0,4(0,8) | | | 3,3 ± ** | | | |
| 225 | 3,7-3,9 | 0 1,1 | 0,2(0,4) | | | (max. 3,0-3,5) | | | |
| 600/500 | - | C, 4-5 | 0,6(1,0) | | | | | | |
| | | | | | | | | | |

Adjust the fuel delivery from each outlet according to the values in [

B. Governor Settings

| Upper rated s | Upper rated speed | | | Intermediate rated speed | | | Lower rated speed | | | Sliding sleeve travel | |
|---------------|----------------------------------|-------------------------|---------------------------------|--------------------------|-----------------------|---------------------------------|-------------------|-----------------------|---------|-----------------------|--|
| deflection | rev/min Control rod travel | Control rod (1a) travel | Degree of deflection of control | | Control rod travel | Degree of deflection of control | | Control rod travel | | 1 | |
| lever | mm | rev/min (28) | lever | rev/min | mm (4) | lever | rev/min | mm (3) | rev/min | mm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| ca. 68 | 1050 | 15,2-17,8 | - | - . | - | ca.8 | 100 | min.5,3 | 225 | 1,3 | |
| | 1350 | 0 - 1,0 | | | | | 225 | 3,7-3,9 | 360 | 2,5-2,9 | |
| | | | † | | | | 290- | 350=2,0 | 1050 | 8,2 | |
| ca. 64 | | 1090-1100 1190-1220 | | | | (3a) | | | | | |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) 2 | | limitation intermediate speed | mediate speed | | Starting Idle switchin | , 0 | Torque- travel | Control rod |
|---|---|-------------------------------|--------------------------|--|------------------------------|-------------------------------|-------------------|-------------|
| rev/min | cm ³ /1000 strokes | rev/min 4e) | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | ww |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| LDA 1050 | 0,7 bar 166,0-168,0 (163,0-171,0) | 1090-1100* | LDA 600 LDA 500 | 0,7 bar 169,0-173,0 (166,0-176,0) 0 bar 126,0-130,0 (123,0-133,0) | 255 | 220,0-270,0 9-13** | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

-2-

D. Adjustment Test for Manifold Pressure Compensator

Test at n =

500

rev/min decreasing pressure - in bar gauge pressure

SCA 11,0 r 2

| Pump/governor | Setting | Measurement | diminution Control rod travel- difference |
|---------------|----------------------|----------------------|---|
| | Gauge pressure = bar | Gauge pressure = bar | mm (1) . |
| 3040 with 379 | 0,41 | | 12,9 - 13,0 |
| | | 0,25 | 11,8 - 12,0 |
| | | | |
| | | | |
| | | | |
| | | | |

Notes.

(1) when n =

rev/min and gauge pressure =

bar (= maximum full-load control rod travel)

Festoil-ISO 4113

PES 6 P 110 A 320 RS 211

0 402 046 056

1 - 5 - 3 - 6 - 2 - 4

test tubing 9 681 230 704

ROV 300...1100 PA 173 KR

companyAllis-Chalmers

1-5-3-6-2-4 Values only apply to test nozzle-and-holder assembly 0 681 343 009 and fuel-injection

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2.8 + 0.1

mm (from BDC)

| Rotational speed rev/min 1 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|----------------------------|----------------------------------|--|---|----------------------------------|--|--|
| 1000 | 12 | 16,0 - 16,8 | | | | |
| 600 | 9 12 | 8,5 - 9,7 15,2 - 16,7 | | | | |
| 200 | 15 9 | 21,5 - 23,3 | | | | |

Adjust the fuel delivery from each outlet according to the values in [

B. Governor Settings

| Upper rated speed | | | Intermediate rated speed | | | Lower rated | speed | Sliding sleeve travel | | | |
|---------------------------------------|--|--|--------------------------|---------------------------------------|-----|-------------------------------|--|--------------------------|-------------------------------|--------------------|-------------------------------|
| Degree of deflection of control lever | rev/min Control rod travel mm | Control rod travel mm rev/min | (a) (2a) | Degree of deflection of control lever | . • | Control rod travel mm 4 | Degree of deflection of control lever | rev/min | Control rod travel mm 3 | rev/min | mm |
| 66° | 1100 1150 1200 1280 1360 | 14,8-17 10,7-14 6,0-11 0- 5 | ,7 ,4 | | | | 10° | 250 300 400 570 | 6,2-8,0 | 350 600 1000 | 1,8-3,0 3,9-4,4 7,0-7,4 |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) 2 | | limitation intermediate speed | | | Starting Idle switchin | $\mathbf{\circ}$ | Torque- travel | Control rod |
|---|------------------|-------------------------------|---------|-------------------------------|------------------------------|-------------------------------|-------------------|-------------|
| rev/min | cm³/1000 strokes | rev/min 😃 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 8 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

| Contro | ad delivery bi-rod stop di temp. 40°C (104°F) (2 | Breakaway | 20 Full-ti | oad delivery 2 rol-rod stop oil temp. 40°C (104°F) | ldle - | fuel delivery 6 | Low i | dle speed 5 |
|--------|--|-----------|------------|--|---------|-----------------|-------|-------------|
| rev/mi | | rev/min | 4 revin | | rev/min | 1 | rev/m | travel |
| 1 | 2 | 3 | ! | 2 | 6 | 7 | 8 | 9 |
| 3 | • | • | • | • | ŧ | • | 1 | ; ; |
| AC-Nr | . 4 320 754 | | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr | . 4 320 793 | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr | . 4 320 815 | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | . 4 320 816 | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19.0-25.0 |
| AC-Nr | . 4 320 817 | | | | | | | ,,. |
| 1100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| AC-Nr. | . 4 320 829 | | | | | | | |
| 1100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| AC-Nr. | 4 320 933 | | | | | | | |
| 900 | 102,0-110,0 | 1040 | 800 | 107,0-116,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 320 939 | | | | | | | |
| 900 | 98,5 + 3 | 1040 | 700 | 107,5 + 4 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr | 4 320 940 | | | _ | | | | 20,0 |
| 900 | 78,0- 86,0 | 1040 | 700 | 100,0-109,0 | 100 | 90,0-130,0 | 200 | 25.0 |
| | 4 320 941 | 70.10 | , 00 | 100,0 100,0 | 100 | 30,0-130,0 | 300 | 25,0 |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 200 | 10 0 05 0 |
| | | 1010 | 700 | 33,0-103,0 | 100 | 30,0-130,0 | 300 | 19,0-25,0 |
| 1000 | 4 320 942 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 400 | 00 0 400 0 | 000 | |
| | | 1020 | 700 | 120,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| | 4 320 980 | 4400 | | | | | | |
| 900 | 108,0-116,0 | 1120 | 800 | - | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| | 4 320 981 | | | | | | | |
| 900 | 111,0-119,0 | 1020 | 800 | 112,0-118,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 321 016 | | | | | | | |
| 750 | 95,0-101,0 | 1020 | 750 | 95,0-101,0 | 100 | 90,0-130,0 3 | 300 | 25,0 |
| NC-Nr. | 4 321 064 | | | | | | | |
| 1000 | 112,0 | 1030 | 800 | 112,5 | 100 | 90,0-130,0 3 | 300 | 25,0 |
| | | | | | | | | |

| C. Settings for Fuel Inject | on Pump with Fitte | d Governor |
|-----------------------------|--------------------|------------|
| | | |

| Full-load (Control-re | | Breakaway | (20) Full-load Control-r | od stop | Starting lidle switching | huel delivery 6 | row Jqj | e speed 5 |
|---------------------------|--|---|-----------------------------|----------------------------|--------------------------|-------------------------------|---------|--------------|
| centuno Lest on re | mp. 40°C (104°F) (2 cm³/1000 strokes | ' I | 49 rev/min | cm³/1000 strokes | i | cm ³ /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | <u> </u> | 2 | 6 | 7 | 8 | 9 |
| | 1 | • | • | • | , | • | • | |
| C-Nr. | 4 359 816 | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 826 | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 828 | | | | | | | |
| 100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19 |
| C-Nr. | 4 359 830 | | | | | | | |
| 025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr | 4 359 832 | | | | | | | |
| 000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| | | .020 | | | | • | | |
| | 4 392 693 | 1065-00 | 900 | 167,0-177,0 | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 050 | 205,0-215,0 | 1065-80 | 300 | 107,0-177,0 | 100 | 150,0-170,0 | , 500 | 13,0-23 |
| | 4 392 695 | | | | | | 000 | 40.0.00 |
| 900 | 149,0-155,0 | 920 | • | - | - | - | 300 | 19,0-25 |
| C-Nr. | 4 392 697 | | | | | | | |
| 750 | 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 699 | | | | | | | |
| 800 | 210,0-218,0 | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr | 4 392 701 | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | • | • | | | | | | |
| 050 | 4 392 703 220,0-230,0 | 1060-70 | 900 | 200,0-210,0 | 100 | 130.0-170.0 | 300 | 19.0-29 |
| 050 | 220,0-230,0 | 1000-70 | 700 | 205,0-215,0 | | 100,0 170,0 | , 000 | 13,0 2. |
| C-Nr | 4 392 707 | | | | | | | |
| 050 | 243,0-253,0 | 1060-80 | 900 | 222,0-232,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| - J-U | ,000,0 | | 700 | 235,0-245,0 | | • | | • |
| C-Nr. | 4 392 709 | | | | | | | |
| 000 | 217,0-223,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| | | - - · | 600 | 219,0-225,0 | | | | |
| C-Nr | 4 392 711 | | | | | | | |
| 10-111 | | | | | | | | |

| C. | Settings | for Fuel Injection Pump with Fitted Governor |
|----|-----------------|--|

| Full-load Control-r Test oil te | | Breakaway | Control | d delivery rod stop temp. 40°C (104°F) | Starting Idle switching | fuel delivery 6 | Low id! | e speed 3 |
|--|-------------------------------|-----------|------------|--|-------------------------------|---------------------------------------|----------|-------------------------------|
| revimin | cm ³ /1000 strokes | rev/min | rev/min | | 1 | cm³/1000 strokes | raiv/min | Control ro- travel 1 mm |
| <u>. </u> | 2 | 3 | - 1 | 2 | 6 | 7 | 8 | 9 |
| ļ | • | • | • | 1 | • | | • | J |
| ic-Nr. | 4 392 715 | | | | | | | |
| 050 | 187,0-193,0 | 1070 | 900 | 174,0-180,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 175,0-181,0 | | | | |
| | 4 392 717 | 4070 | 000 | 405 0 404 0 | 400 | 400 0 470 0 | 222 | |
| 050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 4 392 719 | | | | | | | |
| 050 | 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 1C-N2 | 4 392 7 21 | | | · | | | | |
| 050 | 242,0-248,0 | 1070 | 900 | 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | ,00,0 | | 700 | 230,0-236,0 | | 100,0 | | .,,,,, |
| IC-Nr. | 4 392 723 | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 725 | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 727 | | | | | | | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 729 | | | | | | | |
| 000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 731 | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 392 735 | | | | | | | |
| 050 | 239,0-245,0 | 1070 | 900 | 233,0-239,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | - | | 700 | 273,0-279,0 | | | | |
| C-Nr. | 4 392 737 | | | | | | | |
| 000 | 215,0-221,0 | 1020 | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| • • • | 4 000 700 | | | LLU) U - LLU) U | | | | |
| | 4 392 739 | 4050 | 000 | 105 0 204 0 | 4.00 | 120 0 470 0 | 200 | 10 0 05 |
| 050 | 207,0-213,0 | 1050 | 900 700 | 195,0-201,0 225,0-231,0 | 100 | 130,0-170,0 | 200 | 13,0-25 |
| C-Nr. | 4 392 741 | | | | | | | |
| | 213,0-219,0 | 1070 | 900 | 202,0-208,0 | 100 | 130,0-170,0 | - | - |
| | • | | 700 | 230,0-236,0 | | · · · · · · · · · · · · · · · · · · · | | |
| C-Nr. | 4 392 743 | | | | | | | |
| 050 | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25 |

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| C. | Settings | for | Fuel | Injection | Pump with | Fitted | Governor |
|----|----------|-----|------|------------------|-----------|---------------|----------|
| | | | | | | | |

| Full-load Control-r | od stop | Breakaway | | Hoad d | | idie | fuel delivery 6 | Low idle speed 5 | |
|------------------------|-------------------------------|-----------------------------------|-------------|--------|--|--------------------------|-----------------|------------------|-----------------------------|
| rev/min | cm ³ /1000 strokes | intermediate spea rev/min 3 | | Min | p. 40°C (104°F) cm³/1000 strokes 2 | switchin rev/min 6 | | reiv/mir 8 | Control rod travel mm |
| AC-Nr. | 4 392 747 | • | į | 1 | | | l | | 1 1 |
| 1050 | 227,0-233,0 | 1070 | 900 700 | | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1050 | 4 392 749 230,0-234,0 | 1070 | _ | | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1050 | 4 392 750 230,0-234,0 | 1070 | - | | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 800 | 4 392 768 123,0-133,0 | 820 | 600 |) | 132,0-142,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 875 | 4 392 775/776 162,0-164,0 | 890 | 600 |) | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 950 | 4 392 777 205,0-207,0 | 970 | 700 |) | 195,0-199,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 950 | 4 392 778 208,0-214,0 | 990 | 750 |) | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-27,0 |
| AC-Nr. 1025 | 3 392 779 190,0-200,0 | 1030-40 | 1000 900 | | 191,0-201,0 178,0-188,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1025 | 4 392 781 228,0-238,0 | 1050-60 | 900 700 | | 205,0-215,0 207,0-217,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 940 | 4 392 953 185,0-195,0 | 955-65 | - | | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1050 | 4 393 095 211,0-221,0 | 1060-80 | 900 700 | | 210,0-220,0 238,0-248,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 900 | 4 393 307 210,0-216,0 | 920 | 700 |) | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| AC-Nr. 1050 | 4 393 431 208,0-214,0 | 1070 | 900 700 | | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1050 | 4 393 821 242,0-248,0 | 1070 | 900 700 | | 220,0-226,0 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |

| Full-load Control | d delivery | Breakaway (| 20 Full-to | ad delivery | Idle | fuel delivery 6 | Low 1d | le speed 5 |
|----------------------|-------------------------------|-------------|----------------|----------------------------|------|-------------------------------|-----------------------|-----------------------|
| - 1 | temp. 40°C (104°F) (2 | 1 | \mathfrak{A} | 1 temp. 40°C (104°F) | 1 | ng point | | Control rod travel |
| rev/min | cm ³ /1000 strokes | rev/min \ | rev/mii 1 | n cm³/1000 strokes 2 | 6 | cm ¹ /1000 strokes | r év/m in 8 | 9 |
| | | | | | | 1 | | |
| AC-Nr. | . 4 393 823 | | | | | | | |
| 1050 | 187,0-193,0 | 1070 | 900 | 174,0-180,0 | 100 | 130,0-170,0 | 300 | 19.0-25. |
| | | | 700 | 175,0-181,0 | | ,. | | 13,0 23, |
| AC-Nr. | . 4 393 825 | | | | | | | |
| 1050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| AC-Nn | . 4 393 827 | | | | | | | ,, |
| 1050 | 200,0-206,0 | 1070 | 900 | 100 0 106 0 | 100 | 120 0 170 0 | 200 | 40.0.0 |
| 1030 | 200,0-200,0 | 1070 | 700 | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr | 4 393 829 | | | | | | | |
| 1050 | 230,0-234,0 | 1070 | _ | _ | 100 | 130,0-170,0 | 200 | 10 0 25 (|
| | | | | | 100 | 130,0-170,0 | 300 | 19,0~25,0 |
| | 4 393 831 | 4000 | | | | | | |
| 1050 | 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | 100 | 130,0-170,0 | - | - |
| 8.0. No. | 4 202 022 | | | 200,0 | | | | |
| | 4 393 833 | 1000 1000 | 000 | | | | | |
| 1050 | 264,0 | 1060-1080 | 900 | 280,5 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 393 835 | | | | | | | |
| 1050 | 220,0-226,0 | 1070 | 900 | 210,0-216,0 | 100 | 130,0-170,0 | 300 | 19,0,25,0 |
| | | | 700 | 243,0-249,0 | | | | |
| | 4 393 837 | | | | | | | |
| 1050 | 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300. | 19,0-25,0 |
| | | | ,00 | 247,0~255,0 | | | | |
| | 4 393 890 | | • | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 21,0-27,0 |
| AC-Nr. | 4 393 891 | | | | | | | • |
| 955 | 208,0 | 965-975 | 895 | 203,0 | - | ~ - | | - |
| AC-Nr. | 4 393 961 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 1 | 0 0-25 0 |
| | | 720 | | .,2,0 1,0,0 | 100 | 130,0-170,0 | 300 1 | 3,0-25,0 |
| | 4 394 001 | 700 | 600 | 0.0 0 0.0 | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| AC-Nr. | 4 394 017 | | | | | | | |
| 950 | 208,0-214,0 | 9 90 | 750 | 196,0-202,0 | 100 | 130,6-170,6 | 300 2 | 1,0-27,0 |
| AC-Nr. | 4 394 020 | | | | | | | |
| 700 | 249,0-257,0 | 725 | 600 | 258,0-264,0 | 100 | 130,0-170,0 | 300 1 | 9.N-29 N |
| | - | • | - - | | | . 30,0 170,0 | | J,U-2J,U |

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| | -y | | . . | - WIEI 1 1666 | 4 60 | | lou id | le speed |
|------------------|--|---|---|---|--|-----------------------|---|--|
| Frod stop | | \sim 1 | Control-re | | idle | | | Control root |
| cm³/1000 strokes | rev/min | | | cm³/1000 strokes | 1 | | reiv/mir | travel |
| 2 | 3 | | 1 | 3 | 6 | 7 | 8 | <u> • </u> |
| • | , | • | | | 1 | | , | |
| . 4 394 062 | | | | | | | | |
| 113,0-119,0 | 820 | 6 | 00 | 102,0-108,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| . 4 394 064 | | | | | | | | - |
| 161,0-165,0 | 890 | 6 | 00 | 140.0-144.0 | 100 | 130.0-170.0 | 300 | 19.0-25 (|
| 4 394 066 | | | | • | | ,. | | ,, |
| | 820 | 6 | nn | 13/1 0-1/10 0 | 100 | 120 0 170 0 | 200 | 40 0 00 0 |
| • | OLO | O | 00 | 154,0-140,0 | 100 | 130,0-170-0 | 300 | 19,0-25,0 |
| | 4045 | • | | 400 0 400 0 | | | | |
| • | 1045 | 9 | UU | 180,0-186,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | | | | | | |
| 200,0-206,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 4 004 470 | | • | | 105,0-155,0 | | | | |
| | 055 65 | | | | | | | |
| | 955-65 | | | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | | | | | | |
| 230,0-236,0 | 1040 | | 00 20 | 207,0-213,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 4 204 276 | | , | | 203,0-213,0 | | | | |
| | 4000 | 0.0 | | 400 0 000 | | | | |
| • | 1020 | 8(| טנ | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | | | | | • | |
| 235,0-241,0 | 1020 | 70 |)0 | 263,0-269,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 4 394 080 | | | | | | | | |
| 220,0-226,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 9,0,25,0 |
| | | 60 | IU i | 227,0-233,0 | | | | |
| 4 394 082 | | | | | | | | |
| 190,0 | 930 | - | | - | 100 | 130,0-170,0 | 300 2 | 5,0 |
| 4 394 084 | | | | | | | | |
| 160,0-166,0 | 920 | 70 | 0 1 | 139,0-145,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25.0 |
| 4 394 086 | | | | | | | • | ,0 |
| | 620 | _ | | - | 100 | 130.0 <u>-170</u> 0.3 | 200 4 | 0 0-25 0 |
| , | - - | | | | | 10050-17050 3 | ,00 1 | J,U-23,U |
| | 720 | 600 | n 4 | 24 0-420 0 | 4.00 | 420 0 482 2 = | | |
| | 120 | 000 | u i | 44,U~13U,U | 100 | 130,0-170,0 3 | 300 1: | 9,0-25,0 |
| | 4.6.4 | | | | | | | |
| 139,0-145,0 | 820 | 60(| υ 1 | 24,0-130,0 | 100 | 130,0-170,0 3 | 100 1 | 9,0-25,0 |
| | d delivery irod stop temp. 40°C (104°F) (2) cm³/1000 strokes 2 4 394 062 113,0-119,0 4 394 064 161,0-165,0 4 394 068 192,0-198,0 4 394 070 200,0-206,0 4 394 072 185,0-195,0 4 394 074 230,0-236,0 4 394 078 227,0-233,0 4 394 078 235,0-241,0 4 394 080 220,0-226,0 4 394 084 190,0 190,0 | d delivery 1700 strokes 2 2 113,0-119,0 820 . 4 394 062 . 113,0-119,0 820 . 4 394 064 . 161,0-165,0 890 . 4 394 066 . 125,0-131,0 820 . 4 394 070 . 200,0-206,0 1020 4 394 072 . 185,0-195,0 955-65 4 394 074 . 230,0-236,0 1040 4 394 076 . 227,0-233,0 1020 4 394 088 . 220,0-226,0 1020 4 394 088 . 190,0 930 4 394 084 . 160,0-166,0 920 4 394 088 . 124,0-130,0 620 4 394 088 . 127,0-133,0 720 4 394 088 . 127,0-133,0 720 4 394 088 . 127,0-133,0 720 4 394 089 | delivery irod stop temp. 40°C (104°F) (2) indermodate speed rev/min 3 . 4 394 062 . 113,0-119,0 820 6 . 4 394 064 . 161,0-165,0 890 6 . 4 394 066 . 125,0-131,0 820 6 . 4 394 068 . 192,0-198,0 1045 9 . 4 394 070 . 200,0-206,0 1020 8 . 4 394 074 . 230,0-236,0 1040 9 . 4 394 078 . 235,0-241,0 1020 70 . 4 394 088 . 220,0-226,0 1020 80 . 4 394 086 . 124,0-130,0 620 4 394 088 . 127,0-133,0 720 60 . 4 394 088 . 127,0-133,0 720 60 . 4 394 088 . 127,0-133,0 720 60 . 4 394 088 . 127,0-133,0 720 60 . 4 394 089 | A 394 066 | Control Cont | A 394 062 | A 394 062 113,0-119,0 820 600 140,0-144,0 100 130,0-170,0 | A 394 062 113,0-119,0 820 600 120,0-108,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-195,0 100 130,0-170,0 300 120,0-125,0 100 130,0-170,0 300 120,0-125,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 120,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 100 130,0-170,0 300 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-126,0 122,0-12 |

| _ | A 4 * | | - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | Framp with | | A |
|---|-----------|------|--|-----------------------|--------|-----------|
| _ | CAPPINAL | | | | | I ANNAMAT |
| - | SELLINGS | | PRESCRIPTION AND ADDRESS. | THE AND A PROPERTY OF | LILLER | CUTCHIO |
| £ | A Company | | SOUTH CO. BUILDING | | | |

| Contro | id delivery Inica Rep Immp. 40°C (106°F) | Breakaway | Contro | ad delivery H-rod stop I temp. 40°C (164°F) | idle | tuel delivery 6 | Low 141 | Speed 5 |
|---------|--|-----------|------------|---|---------|------------------|------------|---|
| revimu | • | rev/min | rev/mi | | rev/mir | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | 9 |
| 1 | _1 | 1 | • | I | ı | 1 | • • | |
| AC-Nr | . 4 394 092 | | | | | | | |
| 925 | 157,0-163,0 | 945 | 800 600 | 145,0-151,0 134,0-140,0 | | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | . 4 394 094 | | | | | | | |
| 1000 | 180,0-186,0 | 1020 | 800 700 | 154,0-160,0 142,0-148,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | . 4 394 096 | | | | | | | |
| 1050 | 207,0-213,0 | 1070 | 900 800 | 161,0-175,0 147,0-153,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | . 4 394 098 | | | | | | | |
| 900 | 187,0-193,0 | 920 | 700 | 162,0-168,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| AC-Nr. | 4 394 100 | | | | | | | |
| 900 | 200,0-206,0 | 920 | 700 | 184,0-190,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| AC-Nr. | 4 394 102 | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 104 | | | | | | | |
| 750 | 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 19 | 9.0-25.0 |
| AC-Nr. | 4 394 106 | | | | | | | ,,, |
| 800 | 210,0-218,0 | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 19 | 9.0-25.0 |
| AC-Nr. | 4 394 108 | | | | | , | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| 1050 | 222,0-228,0 | 1070 | 900 | 202,0-208,0 | 100 | 130,0-170,0 | 300 10 | 0 0-25 0 |
| | 22,0 220,0 | | 700 | 207,0-213,0 | .00 | 130,0 170,0 | 300 13 | 7,0-25,0 |
| AC-Nr. | 4 394 110 | | | | | | | |
| 1000 | 240,0-246,0 | 1020 | 800 | 224,0-230,0 | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| | | | 600 | 237,0-243,0 | | | | |
| | 4 394 112 | | | | | | | |
| 1050 | 245,0-251,0 | 1070 | 900 700 | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| ΔC-N∽ | 4 394 114 | | | , , | | | | |
| 1000 | 217,0-223,0 | 1020 | 800 | 197,0-203,0 | 100 | 130 0_170 0 3 | 200 40 | 0.25.0 |
| | | 1020 | 600 | 219,0-225,0 | 100 | 130,0-170,0 3 | 19 | ,0-25,0 |
| AC-Nr. | 4 394 116 | | | | | | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 3 | 300 27 | . 0-33.n |
| AC-Nr. | 4 394 118 | | | - | | | - • | ,0 |
| 1050 | 269,0-275,0 | 1070 | 900 | 281,0-287,0 | 100 | 130,0-170,0 3 | | 0-2E 0 |
| | | | 700 | 293,0-299,0 | . 55 | ,0-1/050 3 | 13 | ,0-25,0 |

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| Full-load delivery Control-rod stop | | Breakaway | | Control-r | | 3 | idle | luel delivery | 0 | Low id | e speed 5 |
|--|-------------------------------|-----------------|---|-----------|---|----------------|----------|---------------------------------------|--------------|---------|-------------------------------|
| Test oil te | mp. 40°C (104°F) (2) | intermediate sp | | | tmp. 40°C (104 cm²/1000 st | · | awitchin | cw ₇ ,1000 stud g bojut | | rev/mun | Control rod travel 1 mm |
| rev/swn | cm ³ /1000 strokes | rev/min 3 | | ev/min | 2 | rokes | 6 | 7 | | 8 | 9 |
| <u>. </u> | | | | | 1 | | | | | | 1 |
| C-Nr. | 4 394 120 | | | | | | | | | | |
| 050 | 234,0-240,0 | 1070 | | 00 00 | 246,0-2 268,0-2 | - • | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 122 | | | | | | | | | | |
| 050 | 262,0-268,0 | 1070 | | 00 | 279,0-2 289,0-2 | - | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 124 | | | | | | | | | | |
| 050 | 241,0-247,0 | 1070 | | 00 | 265,0-2 268,0-2 | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 126 | | | | | | | | | | |
| 900 | 232,0-238,0 | 920 | 7 | 00 | 253,0-2 | 59,0 | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| IC-Nr | 4 394 128 | | | | | | | | | | |
| 750 | 244,0-250,0 | 770 | 7 | 00 | 253,0-2 | 259.0 | 100 | 130.0-1 | 70.0 | 300 | 19,0-25 |
| | | ,,, | · | | 200,0 | ,,,, | | | | | |
| _ | 4 394 130 | | _ | | | | | 400 0 4 | 70 0 | 000 | 40 0 05 |
| 800 | 239,0-245,0 | 820 | 6 | 00 | 248,0-2 | .54 , U | 100 | 130,0-1 | /0,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 132 | | | | | | | | | | |
| 000 | 212,0-218,0 | 1020 | 8 | 00 | 230,0-2 | 36,0 | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 134 | | | | | | | | | | |
| 900 | 288,0-294,0 | 920 | 7 | 00 | 287,0-2 | 93.0 | 100 | 130,0-1 | 70,0 | 300 | 27,0-33 |
| | | | _ | | | | | | | | |
| _ | 4 394 136 | | • | .00 | 070 0 0 | 70.0 | 400 | 420.0.4 | 70 0 | 200 | 40 0 05 |
| 000 | 255,0-261,0 | 1020 | | 00 00 | 272,0-2 270,0-2 | - | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| | | | | | _,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | |
| _ | 4 394 138 | | • | .00 | 000 0 0 | | 400 | 400 0 4 | 7 0 0 | 000 | 40 0 05 |
| 050 | 239,0-245,0 | 1070 | | 00 | 233,0-2 273,0-2 | | 190 | 130,0-1 | /0,0 | 300 | 19,0-25 |
| . | . 204 442 | | • | | | , . | | | | | |
| - | 4 394 140 | 4000 | _ | .00 | 405 0 0 | | 400 | 120 0 4 | 70.0 | 200 | 40.0.05 |
| 000 | 215,0-221,0 | 1020 | | 00 00 | 197,0-2 220,0-2 | | 100 | 130,0-1 | /U,U | 300 | 19,0-25 |
| | | | • | | • - | • | | | | | |
| _ | 4 394 142 | 000 | - | 00 | 054 0 0 |) | 400 | 120 0 4 | 70 0 | 200 | 10 0 05 |
| 900 | 222,0-228,0 | 920 | 7 | 00 | 254,0-2 | U, UØ | 100 | 130,0-1 | /U,Ü | 300 | 19,0-25 |
| C-Nr. | 4 394 144 | | | | | | | | | | |
| 050 | 257,0-263,0 | 1070 | 7 | 50 | 272,0-2 | 78,0 | 100 | 130,0-1 | 70,0 | 300 | 27,0-33 |
| C_A!~ | 4 394 148 | | | | | | | | | | |
| | | 1075 | c | 00 | 309,0-3 | 15 በ | 100 | 130,0-1 | ንበ ሰ | 300 | 25 N |
| 050 | 295,0-303,0 | 1075 | 3 | UU | 303,043 | ,, 0,0 | 100 | 130,0-1 | , u , U | J00 | £3,U |

| C. 36 | ttings for Pt | iei mjecuo | ruin | b Mini Litte | u G0 | AGUIOL | · | |
|--|---|---------------|---------------|---|-------------------------|------------------|---------------|--------------|
| Full-load (Control-re Test oil te | delivery pd stop mp. 40°C (104°F) (2) | Breakaway (2) | ✓ I Controire | delivery 2 od stop mp. 40°C (104°F) | Starting lide awitching | tuel delivery 6 | Low idl | e speed 5 |
| <i>เลษ!เ</i> ก๋เก๋ 1 | cm³/1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | reiv/min 8 | travel mm |
| | | | - | | | | | |
| AC-Nr. | 4 394 150 | | | | | | | |
| 1050 | 268,0-274,0 | 1070 | 900 700 | 274,0-280,0 280,0-286,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 152 | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 154 | | | | | | | |
| 1050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 156 | | | | | | | |
| 1050 | 296,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 158 4 394 157 | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 160 | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| NC-Nr. | 4 394 162 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-Nr. | 4 394 164 | | | | | | • | |
| 925 | 176,0-182,0 | 945 | 800 700 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-Nr. | 4 394 166 | | | | | | | |
| 900 | 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 168 | | | | | | | |
| 925 | 237,0-243,0 | 945 | 800 700 | 251,0-257,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| C-Nr. | 4 394 170 | | | | | | | |
| 750 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| IC-Nr. | 4 394 176 | | | | | | | |
| 050 | 213,0-219,0 | 1070 | 900 700 | 212,0-218,0 240,0-246,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-roc Test oil ten | stop | intermediate speed | high ide s | , | Starting idle switchir | | Low idl | Control rod |
|---|-------------------------------|--------------------|------------|-------------------------------|------------------------------|-------------------------------|---------|-------------|
| rev/min | cm ³ /1000 strokes | rev/min 40 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | T | | 1 | |

AC-Nr. 4 394 246

1050 211,0-220,0 237,5-247,0 100 130,0-170,0 300 19,0-25,0 258,5-269,5 1055-1075 975

700 600 255,5-266,0

Tilt stop part position to obtain quantity at 1050 PRM.

| - | • • | sition to obtain i | mean curve above. | | |
|------------------------------|--|--------------------|-------------------|---------------|---------------|
| AC-Nr 700 600 | 246,0 263,0 | 720 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr 1050 | 244,5-254,5 | 1060-1080 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr 600 | 258,0 | | 100 | 130,0-170,0 | 300 27,0 |
| AC-Nr 1050 900 700 | 246,0 240,0 240,0 267,0 | 1070 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr 1050 900 700 | . 4 394 331 241,0-247,0 265,0-271,0 268,0-274,0 | 1070 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr 1050 900 700 | . 4 394 332 268,0-274,0 274,0-280,0 280,0-286,0 | 1070 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. 1050 900 700 | 269,0-275,0 281,0-287,0 293,0-299,0 | 1070 | 100 | 130,0-170,0 3 | 300 19,0-25,0 |
| AC-Nr. 1050 900 700 | . 4 394 348 234,0-240,0 246,0-252,0 268,0-274,0 | 1070 | 100 | 130,0-170,0 3 | 300 19,0-25,0 |
| AC-Nr. 1050 900 700 | 4 394 349 208,0-214,0 230,0-236,0 260,0-266,0 | 1070 | 100 | 130,0-170,0 3 | 300 19,0-25,0 |
| | 4 394 350 262,0-268,0 279,0-285,0 289,0-295,0 | 1070 | 100 | 130,0-170,0 3 | 00 19,0-25,0 |

900 700

F 14

289,0-295,0

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| C. | Settings | for Fuel in | jection Pum | p with Fitted | Governor |
|----|-----------------|-------------|-------------|---------------|-----------------|
|----|-----------------|-------------|-------------|---------------|-----------------|

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| | delivery | Breakaway | (2 0) | Fuel deli | very characteristics (59 | | fuel delivery (6) | Low id | le speed 5 |
|---------------------|-----------------------------------|------------------|---------------|-------------|-------------------------------|---------|-------------------------------|----------------|----------------|
| Control- | rod stop emp. 40°C (104°F) (2) | intermediate spi | | high idle (| pred (Se) | Idle | ig point | ł | Control ro |
| rev/rpin | cm³/1000 strokes | rev/min | (49) | rev/mia | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | traval j mm |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 0 |
| | | 1 | | | | 1 | 1 | ı | i |
| | 4 394 351 | | | | | | | | |
| 050 900 | 253,0-256,0 252,0-258,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 269,0-275,0 | | | | | | | | |
| | | | | | | | | | |
| C-Nr. | 4 394 352 | | | | | | | | |
| 050 | 262,0-268,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 700 | 267,0-273,0 267,0-273,0 | | | | | | | | |
| | | | | | | | | | |
| C-Nr. | 4 394 353 | | | | | | | | |
| 050 | 279,0-285,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 700 | 283,0-289,0 293,0-299,0 | | | | | | | | |
| ,00 | 233,0-233,0 | | | | | | | | |
| C-Nr. | 4 394 354 | | | | | | | | |
| 050 | 296,0-302,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 7 0 0 | 301,0-307,0 309,0-315,0 | | | | | | | | |
| , 00 | 303,0-313,0 | | | | | | | | |
| C-Nr. | 4 394 356 | | | | | | | | |
| 050 | 246,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 | 240,0 | | | | | | | | |
| 700 | 267,0 | | | | | | | | |
| C-Nr. | 4 394 386 | | | | | | | | |
| 500 | 167,0-175,0 | 620 | | | | 100 | 130,0-170,0 | 300 2 | 25.0 |
| . | 4 004 000 | - | | | | | ,. | | -0,0 |
| | 4 394 390 | | | | | | | | |
| 900 700 | 259,0-267,0 238,0-246,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 19,0-29 |
| 00 | 230,0-240,0 | | | | | | | | |
| -Nr. | 4 394 428 | | | | | | | | |
| 100 | 188,0-196,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 25.0 |
| 00 | 180,0-187,0 | | | • | | | | | |
| -Nr. | 4 394 473 | | | • | | | | | |
| | 189,0-197,0 | 875 | | | | 100 | 120 0 170 0 | 205 5 | |
| | 185,0-193,0 | 0/3 | | | | 100 | 130,0-170,0 | 3 2 3 3 | 0,0 |
| Al- | A 20A E04 | | | | | | | | |
| | 4 394 501 | | | | | | | | |
| | 175,0 158,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | • | | | | | | | | |
| -Nr. | 4 394 521 | | | | | | | | • |
| | 239,0-247,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| 00 | 229,0-235,0 | | | | | | | | |
| | 4 204 507 | | | | | | | | |
| -Nr. | 4 394 527 | | | | | | | | |
| | 4 394 52/ 161,0 | 925 | | | | 100 | 130,0-170,0 | 200 4 | 0 0 05 |

| ttings for Fu | el Injection | Pum | p with Fitte | d Go | | | |
|----------------------------|--|------------------------|--|--|--|--|---|
| delivery od stop | 1 - | Fuel dali high idle | very characteristics (5a) | I ICHO | | Low id | le speed 5 |
| . • | . ^ | .l | | | | . av Imu | Control ro travel o Lome |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| A 204 FA4 | , | I. | ! | i | | i | 1 |
| | 1060-1000 | | | 100 | 120 0 470 (| . 208 | 40.0.0 |
| | 1000-1000 | | | 100 | 130,0-170,0 | J 300 | 19,0-2 |
| | 4040 4000 | | | 480 | | | |
| | 1010-1030 | ` | | 100 | 130,0-170,0 | 300 | 19,0-2 |
| | 4000 4000 | | | | | | |
| 258,0 256,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-2 |
| 4 394 564 | | | | | | | |
| 244,0 | 1070 | | | 100 | 130.0-170.0 | 300 | 19.0-25 |
| 234,0 | | | | | | | , |
| 4 394 569 | | | | | | | |
| 203,0-211,5 | 1010-1030 | | • | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 4 394 590 | | | | | | | |
| 260,5-271,0 | 1060-1080 | | | 100 | | | • |
| | it: 0,40 - 0, | 45 bar | at 750 PRM a | nd 0, | 90 bar pressu | ire, | gap shoi |
| | • | | | | | | |
| 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 4 394 703 | | | | | • | | • |
| 260,5-271,0 | 1060-1080 | 900 | 267,0-278,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| top part posit | ion to obtain | | 267,0-278,0 | | | | |
| mean curve at | ove. Beginni | ng of | movement: 0,4 | 0 - 0 | ,45 bar at 7! | O PR | M and O |
| • • | iou ia pe ozo | • | | | | | |
| 4 394 706 | | | | | | | |
| | 1060-1080 | | | 100 | 130,0-170 | 300 | 19,0-25 |
| • | | • | | | | | |
| | 1070 | | | 100 | 130 0_170 0 | 2 00 | 10 0 25 |
| 234,0 | 1070 | | | 100 | 150,0-170,0 | 300 | 19,0-25 |
| 4 394 718 | | | | | | | |
| 198,0-213,0 | 965-975 | | | 100 | 130,0-170,0 | 300 | 21,0-27 |
| • | | | | | | | |
| 4 394 719 | | • | | | | | |
| 100 0 100 - | | | | 100 | 130,0-170,0 | 300 | 21,0-27 |
| 166,0-168,0 142,5-146,5 | 915 | | | | | | |
| 142,5-146,5 | 915 | | | | | | |
| | 915 | | | 100 | 130,0-170,0 | 300 · | 19 0-25 |
| | delivery and stockes 2 4 394 541 202,0-210,5 4 394 550 230,5-239,5 4 394 561 258,0 256,0 4 394 569 203,0-211,5 4 394 590 260,5-271,0 ing of movement. 4 394 593 251,5-261,5 4 394 703 260,5-271,0 top part positimean curve at essure, gap stockes and essure and essure | ## Section of Stock | ## Section of Stockes Breakaway Section of Stockes Cm²/1000 stro | ### Services Breakaway Bre | Breakaway Brea | Selectivery 20 Stop 20 20 20 20 20 20 20 2 | A 394 550 1060-1080 100 130,0-170,0 300 130,0-170,0 300 |

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Ito

| C. Settings for Fuel Injection Pump with Fitte | d Governor |
|--|------------|
|--|------------|

| Control | d delivery -rod stop | Breakaway 20 | Fuel deli high idle | very characteristics (5e) | idle : | _ | Low idl | e speed 5 |
|--------------------|---|--------------|------------------------|------------------------------------|--------------|------------------------------------|--------------|-----------------------|
| 1 | temp. 40°C (104°F) (2) | rev/min 4a | |) | ļ | ng point | | Control rod travel |
| rev/min | cm ³ /1000 strokes | revimin 49 | rev/min 4 | cm ³ /1000 strokes 5 | rev/min 6 | cm ³ /1000 strokes 7 | rev/min 8 | mm 9 |
| ACANE | . 4 394 740/741 | | | | | | | |
| 1020 915 | 213,0-226,0 208,0-218,0 | 1030-1040 | | | | | | |
| AC-Nr | . 4 394 744 | | | | | | | |
| 1050 900 | 250,0 256,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | . 4 394 745 | | | | | | | |
| 950 750 | 208,0-214,0 196,0-202,0 | 990 | | | 100 | 130,0-170,0 | 300 2 | 21,0-27,6 |
| AC-Nr. | . 4 394 746 | | | | | | | |
| 875 600 | 161,0-165,0 140,0-144,0 | 890 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | . 4 394 771 | | | • | | | | |
| 800 600 | 113,0-119,0 102,0-108,0 | 820 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 773 | | | | | | | |
| 800 600 | 125,0-131,0 134,0-140,0 | 820 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 775 | | | | | | | |
| 1025 900 | 192,0-198,0 180,0-186,0 | 1045 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 777 | | | | | | | |
| 1000 800 600 | 200,0-206,0 180,0-186,0 189,0-195,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 779 | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | • | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 781 | | | | | | | |
| 025 900 700 | 230,0-236,0 207,0-213,0 209,0-215,0 | 1040 | ٠ | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 783 | | | | | | | |
| 000 800 | 227,0-233,0 197,0-203,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 785 | | • | | | | | |
| 000 700 | 235,0-241,0 263,0-269,0 | 1020 | | | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |

F 17

| C. Settings for Fuel Injection Pump with Fitted G | Governor |
|---|----------|
|---|----------|

| Full-load (| | Breakaway | a | Fuel delin | very characteristics (50 | Starting lidle | fuel delivery 6 | Low idl | e speed 3 |
|---------------------------|-------------------------------|------------------|----------|------------|-------------------------------|----------------|---|---------|-------------|
| Control-ro Test oil te | od stop mp. 40°C (104°F) 2 | intermediate spr | md | Ingn are t | 9 | switchin | g point | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min | (4) | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rév/min | m/m |
| 1 | 2 | 3 | | <u> </u> | 5 | 6 | 7 | 8 | 9 |
| C-Nr | 4 394 787 | • | | • | | • | | | |
| 000 | 220,0~226,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 800 | 209,0-215,0 | 1020 | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | ,. |
| 600 | 227,0-233,0 | | | | | | | | |
| C-Nr. | 4 394 789 | | | | | | | | • |
| 910 | 190,0 | 930 | | | | 100 | 130,0-170,0 | 300 | 25,0 |
| | - | | | | | | | | |
| - | 4 394 791 | 020 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 700 | 160,0-166,0 139,0-145,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 15,0 25 |
| | | | | | | | | | |
| | 4 394 793 | 600 | | | | 100 | 130.0-170.0 | 300 | 10 0-25 |
| 600 | 124,0-130,0 | 620 | | | | 100 | 130,0-170,0 | 300 | 13,0~23 |
| C-Nr. | 4 394 795 | | | | • | | | | |
| 700 | 127,0-133,0 | 720 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 124,0-130,0 | | | | | | | | |
| C-Nr. | 4 394 797 | | | | | | | | |
| 800 | 139,0-145,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 124,0-130,0 | | | | | | | | |
| C-Nr. | 4 394 799 | | | | | | | | |
| 925 | 157,0-163,0 | 945 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 600 | 145,0-151,0 134,0-140,0 | | | | | | | | |
| | | | | | | | | | |
| | 4 394 801 | 4000 | | | | 4.00 | 120 0 170 0 | . 200 | 10 0-25 |
| 000 800 | 180,0-186,0 154,0-160,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 142,0-148,0 | | | | | | | | |
| C-Nr. | 4 394 803 | | | | | | | | |
| 050 | 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 | 161,0-175,0 | | | | | | | | • • • • |
| 800 | 147,0-153,0 | | | | | | | | |
| C-Nr. | 4 394 805 | | | | • | | | | |
| 900 | 187,0-193,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| 700 | 162,0-168,0 | | | | | | | | |
| C-Nr. | 4 394 807 | | | | | | | | |
| 900 | 200,0-206,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| 700 | 184,0-190,0 | | | | | | | | |
| C-Nr. | 4 394 809 | | | | | | | | |
| 900 | 203,0-209,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 209,0-215,0 | | | | | | | | |

| Full-load o | lelivery | Breakaway | (a) | Fuel deli | very characteristics (5e) | Starting | tuel delivery (6) | Low idl | e speed 5 |
|-------------------|---|------------------|------------|-----------|---------------------------|------------------|-------------------|---------|--------------|
| Control-re | | intermediate ape | | high idea | (S) | idle switchin | • | | Control rod |
| tex/wni | cm³/1000 strokes | rev/min | • | tev/min | cm³/1000 strokes | 1 | cm-V1000 strokes | revimin | travel mm |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 |
| AC-Nr. | 4 394 811 | | | | | | | | |
| 750 600 | 185,0-191,0 222,0-228,0 | 770 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 813 | | | | | | | | |
| 800 600 | 210,0-218,0 223,0-229,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 815 | | | | | | | | |
| 050 900 700 | 222,0-228,0 202,0-208,0 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 817 | • | | | | | | | |
| 000 800 600 | 240,0-246,0 224,0-230,0 237,0-243,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 819 | | | | | | | | |
| 050 900 700 | 245,0-251,0 224,0-230,0 237,0-243,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 821 | | | | | | | | |
| 000 800 600 | 217,0-223,0 197,0-203,0 219,0-225,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 823 | | | | | | | | |
| 900 700 | 210,0-216,0 212,0-218,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 394 825 | | | | | | | | |
| 900 | 269,0-275,0 281,0-287,0 293,0-299,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 19,0-25, |
| C-Nr. | 4 394 827 | | | | | | | | |
| 900 | 234,0-240,0 246,0-252,0 268,0-274,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 19,0-25, |
| C-Nr. | 4 394 829 | | | | | | | | |
| 050 900 | 262,0-268,0 279,0-285,0 289,0-295,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |

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100 130,0-170,0 300 19,0-25,0

1050 900 700 241,0-247,0 265,0-271,0 268,0-274,0

1070

| C. | Settings for | Fuel injection | Pump with | Fitted Governor |
|----|--------------|----------------|------------------|-----------------|

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| C. S | ettings for Fu | el inject | ion | Pum | p with Fitte | d Go | vernor | | | |
|--------------------|--|-----------|------------|-----------------------|------------------------------------|---------|-------------------------------|------------------|-----------|--|
| Control | d delivery i-rod stop temp. 40°C (104°F) (2) | | | Fuel deliningh idle s | rery characteristics (5e peed (50) | idle | fuel delivery (6) ng point | Low idle speed 5 | | |
| (ev/min | | rev/min | _ • | rev/min | cm ³ /1000 strokes | rev/min | | rév/mu | travel | |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 0 | |
| , | | , – – | | 1 | l | ! | 1 | 1 | 1 1 | |
| AC-Nr. | . 4 394 833 | | | | | | | | | |
| 900 700 | 232,0-238,0 253,0-259,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | . 4 394 835 | | | | | | | | • | |
| 750 700 | 244,0-250,0 253,0-259,0 | 770 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 837 | | | | | | | | | |
| 800 600 | 239,0-245,0 248,0-254,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 839 | | | | | | | | | |
| 1000 800 | 212,0-218,0 230,0-236,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 841 | | | | | | | | | |
| 900 700 | 288,0-294,0 287,0-293,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33,0 | |
| AC-Nr. | 4 394 843 | | | | | | | | | |
| 1000 800 600 | 255,0-261,0 272,0-278,0 270,0-276,0 | 1020 | | | | 100 | 130,0-170,0 | 300 ° | 19,0-25,0 | |
| AC-Nr. | 4 394 845 | | | | | | | | | |
| 1050 900 700 | 239,0-245,0 233,0-239,0 273,0-279,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| AC-Nr. | 4 394 847 | | | | | | | | | |
| 1000 800 600 | 215,0-221,0 197,0-203,0 220,0-226,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| AC-Nr. | 4 394 849 | | | | | | | | | |
| 900 700 | 222,0-228,0 254,0-260,0 | 920 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| AC-Nr. | 4 394 851 | | | | | | | | | |
| 1050 750 | 257,0-263,0 272,0-278,0 | 1070 | | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 | |
| AC-Nr. | 4 394 853 | | | | | | | | | |
| 1050 900 | 295,0-303,0 309,0-315,0 | 1075 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 | |
| AC-Nr. | 4 394 857 | | | | | | | | | |
| 1050 900 700 | 262,0-268,0 267,0-273,0 267,0-273,0 | 1070 | - سنج الم | | | 100 | 130,0-170,0 3 | 300 1 | 9,0-25,0 | |
| | ,- 2/030 | 7 | O C | Hail | 190 11 | 12 | 1 | | | |

E20

C. Settings for Fuel Injection Pump with Fitted Governor

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| Control | | i · | | ivery characteristics (5a speed (5b) | idle | <u> </u> | Low idle speed 5 | | |
|------------|----------------------------|--------------------|------------|--------------------------------------|---------|-------------------------------|------------------|------------|--|
| | emp. 40°C (104°F) (2) | intermediate speed | \sim l | _ | switchi | ng point | Ì | Control ro | |
| rev/min | cm³/1000 strokes | rev/min | 19 rev/min | cm³/1000 strokes | 1 | cm ³ /1000 strokes | rev/min | mm. | |
| | 2 | - | | 5 | 6 | 7 | 8 | 9 | |
| | | | | | • | | | | |
| C-Nr. | 4 394 861 | | | | | | | | |
| 050 | 296,0-302,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| 900 | 301,0-307,0 | | | | | | | | |
| 700 | 309,0-315,0 | | | | | | | | |
| C-Nr. | 4 394 863 | | | | | | | | |
| 050 | 253,0-256,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| 980 | 252,0-258,0 | | | | | | | - | |
| 700 | 269,0-275,0 | | | | | | | | |
| C-Nr. | 4 394 865 | | | | | | | | |
| 050 | 208,0-214,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9.0-25 | |
| 900 | 230,0-236,0 | 1070 | | | ,00 | 150,0 170,0 | 300 1 | J,U-23 | |
| 700 | 260,0-266,0 | | | | | | | | |
| C-Nr | 4 394 867 | | | | | | | | |
| _ | | 020 | | | 4:00 | 420 0 470 0 | 200 4 | 0 0 25 | |
| 900 700 | 181,0-187,0 172,0-178,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| , 00 | 172,0-170,0 | | | | | | | | |
| C-Nr. | 4 394 869 | | | | | | | | |
| 925 | 176,0-182,0 | 945 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| B00 | 162,0-168,0 | | | | | | | | |
| 700 | 177,0-183,0 | | | | | | | | |
| C-Nr. | 4 394 871 | | | | | | | | |
| 900 | 173,0-179,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9.0-25 | |
| 800 | 160,0-166,0 | | | | | | | | |
| r_Nr | 4 394 873 | | | | | | | | |
| | | OAE | | | 100 | 130,0-170,0 | 200 2 | 7 0 22 | |
| 925 300 | 237,0-243,0 251,0-257,0 | 945 | | | 100 | 130,0-170,0 | 300 2 | /,0-33 | |
| 700 | 269,0-275,0 | | | | | | | | |
| - N | 4 394 875 | | | | | | | | |
| | | 700 | | | 400 | 400 0 470 0 | 202 - | 7 6 22 | |
| 700 500 | 218,0-224,0 240,0-246,0 | 720 | | | 100 | 130,0-170,0 | 300 2 | /,0-33 | |
| ,00 | 27030-27030 | • | | | | | | | |
| C-Nr. | 4 394 877 | | | | | | | | |
| | 213,0-219,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| | 212,0-218,0 | | | | | - | | = | |
| 700 | 240,0-246,0 | | | | | | | | |
| -Nr. | 4 394 879 | | | | | | | | |
| 150 | 211,0-220,0 | 1055-1075 | 975 | 237,5-247,0 | 100 | 130,0-170,0 | 19.0- | 25.0 | |
| . • • | | | 700 | 258,5-269,5 | | ,,.,. | , - 1 | ,- | |
| | | | 600 | 255,5-266,0 | | | | | |

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

| C. Settings for | or Fuel Inj | ection Pump w | rith Fitted (| Governor |
|-----------------|-------------|---------------|---------------|----------|

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| Full-load Control-n | | Breakaway 20 | Fuel delh | very characteristics (50 | Starting | fuel delivery 6 | Low idle speed 5 | |
|------------------------|---|--------------------|-----------------|-------------------------------|----------|------------------|------------------|--------------------|
| | mp. 40°C (104°F) 2 | intermediate speed | | (30) | switchin | ng point | Control ro | |
| rav/miń | cm³/1000 strokes | rev/min 49 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | reiv/mm | mm . |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | • |
| | | | | | | | | |
| AC-Nr. | 4 394 881 | | | | | | | |
| 700 600 | 246,0 263,0 | 720 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 833 | | | | | | | |
| 050 | 244,5-254,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| \C-Nr. | 4 394 885 | | | | | | | |
| 600 | 258,0 | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| NC-Nr. | 4 394 891 | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| lC-Nr. | 4 394 893 | | | • | | | | |
| 900 | 259,0-267,0 | 925 | | | 100 | 130,0-170,0 | 300 | 19,0-29,0 |
| 700 | 238,0-246,0 | | | | | | | |
| | 4 394 895 | | | | | | | |
| 000 800 | 188,0-196,0 180,0-187,0 | 1025 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| C-Nr. | 4 394 897 | | | | | | | |
| 850 750 | 189,0-197,0 185,0-193,0 | 875 | | | 100 | 130,0-170,0 | 325 | 30,0 |
| C-Nr. | 4 394 899 | | | | | | | |
| 900 | 175,0 | 925 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 700 | 158,0 | | | | | | | |
| | 4 394 905 | 1005 | | | 400 | 120 0 170 0 | 200 | 05 0 |
| | 239,0-247,0 229,0-235,0 | 1025 | | | 100 | 130,0-170,0 | 300 | 25, U |
| C-Nr. | 4 394 907 | | | | | | | |
| 900 | 161,0 | 925 · | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| Beginn | 151,0 ing of movement ar pressure, ga | t: 0,40 - 0,4 | 5 bar "020". | at 750 PRM a | nd | | | |
| • | 4 394 909 | ., | | | | | | |
| | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 911 | | | | | - | | • |
| | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25.0 |
| C-Nr. | 4 394 915 | | | | | • | - | |
| | 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 ° | 19.0-25 N |
| | | | | | . 00 | .00,0 170,0 | | , 0-20,0 |

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load di Control-roi Test oil ten | d stop | intermediale apped | high ide s | _ | Starting idle switchir | | Low idl | e speed 5 |
|---|-------------------------------|--------------------|------------|-------------------------------|------------------------|-------------------------------|---------|--------------|
| rev/min | cm ³ /1000 strokes | revimin 40 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | 1 | | | | |

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AC-Nr. 4 394 917

1050 260.5-271.0 1060-1080

100 130,0-170,0 300 19,0-25,0

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and

0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 919

1050 215,5-261,5 1060-1080

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 921

1050 260,5-271,0 1060-1080 900

267,0-278,0 100 130,0-170,0 300 19,0-25,0

700 267.0-278.0

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above. Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 925

1050 244,0 1070

100 130,0-170,0 300 19,0-25,0

900 234,0

AC-Nr. 4 394 997

900 173,0-179,0 800 160,0-166,0 920

100 130,0-170,0 300 19,0-25,0 Testoil-ISO 4113

PE 6 P 120/420 LS 152

ROV 300...1050 PA 154 KR

0 401 846 178 ; 0 401 846 228 1 - 5 - 3 - 6 - 2 - 4

companyAllis-Chalmers engine: 16000-25000

test tubing 9 681 230 703

Values only apply to test nozzle-and-holder assembly 0 681 443 022 and fuel-injection

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2.8 + 0.1

mm (from BDC)

| Rotational speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm³/ 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|--------------------------|----------------------------------|--|--|----------------------------------|--|--|
| 1000 | 12 | 26,4 - 27,1 | | | 1,0 | |
| 600 | 6 12 | 8,6 - 9,8 26,2 - 28,2 | | | | |
| 200 | 15 6 | 33,8 - 36,2 4,2 - 5,2 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rated | speed | | | Intermediate | rated spe | ed | Lower rated | speed | | Slidina s | leeve travel |
|---------------------------------------|---|--|-------------|--|--------------|-------------------------------|--|--------------------------|------------------------------------|-----------|----------------|
| Degree of deflection of control lever | rev/min Control rod travel mm 2 | Control rod travel mm rev/min | (a) (2a) | Degree of deflection of control lever | rev/min 5 | Control rod travel mm 4 | Degree of deflection of control lever | rev/min | Control rod travel mm 3 | rev/min | 1) mm 11 |
| 66° | 1050 1100 1150 1210 | 15,0-18 10,7-15 6,0-11 0,7 | ,0 | | | | 10° | 250 350 450 550 | 6,4-8,0 3,0-5,2 1,3-2,8 0 | | |

Torque control travel a =

mm

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) 2 | | Rotational-speed (2b) Fuel delivery charactimitation intermediate speed (5b) | | | ics(5e) Starting fuel delivery 6 Idle switching point | | | Control rod |
|---|------------------|--|---------|------------------|---|-------------------------------|---------|--------------|
| rev/min | cm³/1000 strokes | rev/min 4a | rev/min | cm³/1000 strokes | rev/min | cm ² /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

| Contro | id delivery Frod stop | Breakaway (| Full-load Control- | od stoo | Idle | fuel delivery 6 | Low id | le speed 5 |
|---------|---|-------------|-----------------------|--------------------------------------|---------------------|-------------------------------|------------|-----------------------------------|
| rey/mit | temp. 40°C (104°F) (2) cm³/1000 strokes | | Prev/min | mp. 40°C (104°F) cm³/1000 strokes | awitchin rev/min | cm ³ /1000 strokes | rev/min | Control rod : travel n mm |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | 9 |
| | • | • | • | 1 | 5 I | | ı | |
| | . 4 320 754 | 4040 | 700 | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| | 4 320 793 | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 815 | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| 40.11 | مراجع المعارض المعارض المعارض المعارض المعارض المعارض المعارض المعارض المعارض المعارض المعارض المعارض المعارض | | 000 | 111,07117,0 | | | | |
| 900 | 4 320 816 97,0-103,0 | 910-920 | 800 | 00 0 101 0 | 400 | 00 0 400 0 | 200 | 40 0 05 0 |
| | | 310-320 | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| | 4 320 817 | 4400 | 000 | 440 0 453 0 | 400 | | | |
| 1100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| AC-Nr. | 4 320 829 | | | | | | | . |
| 1100 | 139,0-143,0 | 1120 | 800 | 149,0-154,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| | | | 600 | 153,0-161,0 | | | | • |
| AC-Nr. | 4 320 933 | | | | | | | |
| 900 | 102,0-110,0 | 1040 | 800 | 107,0-116,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 320 939 | | | | | | | |
| 900 | 98,5 <u>+</u> 3 | 1040 | 700 | 107,5 + 4 | 100 | 90,0-130,0 | 300 ` | 25,0 |
| AC-Nr. | 4 320 940 | | | | | | | |
| 900 | 78,0- 86,0 | 1040 | 700 | 100,0-109,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 320 941 | | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 320 942 | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 1 | 9.0-25.0 |
| AC-Nr. | 4 320 980 | | | | | | | -,- 20,0 |
| 900 | 108,0-116,0 | 1120 | 800 | _ | 100 | 90,0-130,0 | 375 | 9 n_10 n |
| | 4 320 981 | | | | | 30,0 100,0 . | <i>373</i> | 3,0-13,0 |
| 900 | 111,0-119,0 | 1020 | 800 | 112,0-118,0 | 100 | 90,0-130,0 3 | 200 | 25.0 |
| | • | 1020 | | 11230-11030 | 100 | Ju,0-130,0 3 | 000 | 25,0 |
| 750 | 4 321 016 95,0-101,0 | 1020 | 750 | 95,0-101,0 | 100 | 90,0-130,0 3 | 200 | 25.0 |
| | | . 424 | , 55 | JJ3U-1013U | 100 | 30,0-130,0 3 | UU | 25,0 |
| _ | 4 321 064 | 1020 | 000 | 140 5 | 400 | 00 0 400 0 5 | | |
| 1000 | 112,0 | 1030 | 800 | 112,5 | 100 | 90,0-130,0 3 | SUU | 25,0 |

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| Full-load of | d stoo | Breakaway | | Full-load o | ia mob , | 3 | Starting i | fuel delivery | Pow | idle | speed 3 |
|----------------------|--|-----------|---|-------------------------|--------------------------------------|-------------|------------|-----------------------------|-------|------------|-----------------------------|
| • | mp. 40°C (104°F) (2) am²/1000 strokes | rev/min | | rest oll tel rev/min | mp. 40°C (104°F) cm²/1000 strok | - | | g point cm³/1000 strokes | revi | min 1 | Control rod travel mm |
| restrain 1 | 2 | 3 | | i | 2 | | 6 | 7 | 8 | | 9 |
| المالة والمناسط والم | | 1 | | | | | ! | | 1 | ı | |
| C-Nr. | 4 359 816 | | | | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | | 700 | 101,0-10 | | 100 | 90,0-130 | .0 30 | 0 | 19,0-25 |
| | | | 6 | 500 | 111,0-11 | 7,0 | | | | | |
| C-Nr. | 4 359 826 | | | | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 8 | 300 | 98,0-104 | 1,0 | 100 | 90,0-130 | ,0 30 | 0 | 19,0-25 |
| C-Nr. | 4 359 828 | | | | | | | | | | |
| 100 | 139,0-143,0 | 1120 | | 300 | 149,0-154 | | | 90,0-130 | ,0 37 | ' 5 | 9,0-19 |
| | | | 6 | 500 | 153,0-16 | 1,0 | | | | | |
| NC-Nr. | 4 359 830 | | | | | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 7 | 700 | 99,0-10 | 3,0 | 100 | 90,0-130 | ,0 30 | 0 | 19,0-25 |
| NC-Nr. | 4 359 832 | | | | | | | | | | |
| 000 | 122,0-124,0 | 1020 | 7 | 700 | 126,0-130 | 0,0 | 100 | 90,0-130 | ,0 30 | 0 | 19,0-25 |
| IC-Nr | 4 392 693 | | | | | | | | | | |
| 050 | 205,0-215,0 | 1065-80 | g | 900 | 167,0-17 | 7.0 | 100 | 130,0-170 | .0 30 | 00 | 19,0-25 |
| | | | | | • | • | | · | - | | • |
| | 4 392 695 | 920 | _ | _ | _ | | _ | _ | 3(| nn | 19,0-25 |
| 900 | 149,0-155,0 | 920 | | | | | | | 50 | ,, | 1350-23 |
| | 4 392 697 | | | | | | | | | | |
| 750 | 185,0-191,0 | 770 | (| 500 | 222,0-22 | 8,0 | 100 | 130,0-170 | ,0 30 |)0 | 19,0-25 |
| C-Nr. | 4 392 699 | | | | | | | | | • | |
| 800 | 210,0-218,0 | 820 | (| 500 | 223,0-22 | 9,0 | 100 | 130,0-170 | ,0 30 | 00 | 19,0-25 |
| IC-Nr. | 4 392 701 | | | | | | | | | | |
| 900 | 203,0-209,0 | 920 | 7 | 700 | 209,0-21 | 5,0 | 100 | 130,0-170 | ,0 30 | 00 | 19,0-25 |
| C-Nr. | 4 392 703 | | | | | | | | | | |
| 1050 | 220,0-230,0 | 1060-70 | 9 | 900 | 200,0-21 | | | 130,0-170 | ,0 30 | 00 | 19,0-25 |
| | | | | 700 | 205,0-21 | 5,0 | 1 | | | | |
| IC-Nr. | 4 392 707 | | | | | | | • | | | |
| 050 | 243,0-253,0 | 1060-80 | | 900 | 222,0-23 | - | | 130,0~170 | ,0 30 | 00 | 19,0-25 |
| | | | | 700 | 235,0-24 | 5,0 | 1 | | | | |
| C-Nr. | 4 392 709 | | | | | | | | | | |
| 000 | 217,0-223,0 | 1020 | | 800 | 197,0-20 | | | 130,0-170 | ,0 30 | 00 | 19,0-25 |
| | | | (| 500 | 219,0-22 | ວ, U | • | | | | |
| C-Nr. | 4 392 711 | | | | | | | | | | |
| 600 | 231,0-237,0 | 620 | • | - | - | | - | - | 30 | 00 | 19,0-25 |

| C | Settings f | or Fuel Inic | action Pumr | with Fitt | ed Governor |
|---|-------------|--------------|-------------|-----------|--------------|
| • | A4111112A . | o ao. ag. | ander and | | ou actionist |

| Full-load Control-r | delivery od stop imp. 40°C (104°F) (2) | Breakaway | Contro | nd delivery 2 Frod stop I temp. 40°C (104°F) | | fuel delivery 6 | Low id | le speed 3 |
|------------------------|--|-----------|------------|--|-----|------------------|--------|--------------------------------|
| ton/wiv | cm³/1000 strakes | rev/min | (rev/mu | | i | cm³/1000 strokes | rev/mu | Control ro travel n i mm |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | • |
| I | • | 1 | • | 4 | ı | I | 1 | 1 |
| C-Nr. | 4 392 715 | | | | | | | |
| 050 | 187,0-193,0 | 1070 | 900 | 174,0-180,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 175,0-181,0 |) | | | |
| | 4 392 717 | | | | | | | |
| 050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 392 719 | | | | | | | |
| 050 | 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | · · · · · • • · · · · | | 700 | 214,0-220,0 | 1 | | | |
| | 4 392 721 | 4070 | 000 | 000 0 000 0 | 400 | 400 0 470 0 | | 40.0.0 |
| 050 | 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C-Nn | 4 392 723 | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | 4 392 725 | ••• | , , , | ,,. | | ,. | | .5,0 .0 |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | Œ | 020 | 000 | 240,0 201,0 | .00 | .00,0 .70,0 | 300 | 13,0 23 |
| C-Nr. 900 | 4 392 727 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 200 | 10 0-25 |
| | 232,0-238,0 | 320 | 700 | 255,0~255,0 | 100 | 130,0-170,0 | 300 | 19,0~25 |
| | 4 392 729 | | | | | | | |
| 000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 160 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 731 | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 392 735 | | | | | | | |
| 050 | 239,0-245,0 | 1070 | 900 700 | 233,0-239,0 273,0-279,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 2/3,U~Z/3,U | | | | |
| | 4 392 737 | 4000 | 000 | 407 0 000 0 | | 400 0 400 0 | 000 | 40 5 5- |
| 000 | 215,0-221,0 | 1020 | 800 600 | 197,0-203,0 220,0-226,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C_81~ | 4 392 739 | | | | | | | |
| 050 | 207,0-213,0 | 1050 | 900 | 195,0-201,0 | 100 | 130,0-170,0 | 300 | 10 0-25 |
| | | | 700 | 225,0-231,0 | .00 | 10050 17050 | J00 | 19,0-23 |
| C-Nr. | 4 392 741 | | | | | | | |
| | 213,0-219,0 | 1070 | 900 | 202,0-208,0 | 100 | 130,0-170,0 | - | - |
| | | • | 700 | 230,0-236,0 | | | | |
| | 4 392 743 | | | | | | | |
| 050 | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |

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| | | | | | | | w • | | |
|----|-----------------|-----|------|-----|--------|------|------|---------------|----------|
| C. | Settings | for | Fuel | Inj | ection | Pump | with | Fitted | Governor |

| Full-load Control-r Test oil M | | Breakaway intermediate apec | _ | Full-load d Control-ro Test oil ter | d stop np. 40°C (104°F) | Starting Idle switching | fuel delivery 6 | Low id | le speed 5 Control rod |
|--------------------------------------|--------------------------|--------------------------------|----------|---|-------------------------------|-------------------------------|------------------|--------------|---------------------------|
| rev/min | cm³/1000 strokes | rev/min 3 | Θ | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min 8 | travel mm |
| - | 2 | 3 | | | 1 | • | <u> </u> | | 1 |
| C-Nr. | 4 392 747 | | | | | | | | |
| 050 | 227,0-233,0 | 1070 | | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 392 749 | | | | | | | | |
| 050 | 230,0-234,0 | 1070 | • | - | - | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-Nr. | 4 392 750 | | | | | | | | |
| 050 | 230,0-234,0 | 1070 | • | - | - | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 392 768 | | | | | | | | |
| 800 | 123,0-133,0 | 820 | (| 500 | 132,0-142,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 392 775/776 | 900 | | con | 140 0 144 0 | 100 | 120 0.170 0 | 200 | 10.0.25 |
| 875 | 162,0-164,0 | 890 | , | 500 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-Nr. 950 | 4 392 777 205,0-207,0 | 970 | | 700 | 195,0-199,0 | 100 | 130,0-170,0 | 300 | 19 0-25 |
| | | 370 | • | 700 | 199,0-199,0 | 100 | 150,0-170,0 | 300 | 19,0-20, |
| 950 | 4 392 778 208,0-214,0 | 990 | • | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21.0-27. |
| | 3 392 779 | 330 | • | | 130,0 202,0 | ,,,, | ,. | | 21,0 27, |
| 025 | 190,0-200,0 | 1030-40 | 10 | 000 | 191,0-201,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | | | 9 | 900 | 178,0-188,0 | | | | |
| | 4 392 781 | | | | | | | ·. | |
| 025 | 228,0-238,0 | 1050-60 | | 900 700 | 205,0-215,0 207,0-217,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 392 953 | | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | • | - | - | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 393 095 | | | | | | | | |
| 050 | 211,0-221,0 | 1060-80 | | 900 | 210,0-220,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | | | 7 | 700 | 238,0-248,0 | | | | |
| | 4 393 307 | 020 | | 700 | 242 0.240 0 | 100 | 120 0-170 ñ | 200 | 27 0 22 0 |
| 900 | 210,0-216,0 | 920 | • | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 27,U - 33, |
| C-Nr. 050 | 4 393 431 208,0-214,0 | 1070 | ç | 900 | 230,0-235,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | | | | 700 | 260,0-266,0 | | | | ,, |
| C-Nr. | 4 393 821 | | | | | | | | |
| 050 | 242,0-248,0 | 1070 | | 900 700 | 220,0-226,0 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | | | • | J U | 20,0-20,0 | | | | |

| ettings for Fl | iei miectic | n Pun | ip with Fitte | a Go | vernor | |
|--|---|--|--|--|--|--|
| delivery rod stop temp. 40°C (104°F) (2) | Breakaway (| Control- | rod stop | ملاا ا | O | Low idle speed 5 |
| cm³/1000 strokes | revimin (| rev/min | cm ² /1000 strokes 2 | rev/min 6 | cm³/1000 strokes 7 | raiv/min mm 8 9 |
| | J | | | ł | 1 | |
| . 4 393 823 | | | | | | |
| 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | 100 | 130,0-170,0 | 300 19,0-25, |
| 4 393 825 | | | | | | |
| 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 19,0-25, |
| 4 393 827 | | | | | | • |
| 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 19,0-25, |
| 4 393 829 | | | | | | |
| 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 19,0-25,0 |
| 4 393 831 | · | | | | | |
| 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | 100 | 130,0-170,0 | |
| 4 393 833 | | | | | | |
| 264,0 | 1060-1080 | 900 | 280,5 | 100 | 130,0-170,0 | 300 19.0-25.0 |
| 4 393 835 | | | - | | ,. | ,,. |
| 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 19,0,25,0 |
| 4 393 837 | | | | | | |
| 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 ⁻ 19,0-25,0 |
| 4 393 890 | | · | • | | | |
| 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 21,0-27,0 |
| 4 393 891 | | | | | | • |
| 208,0 | 965-975 | 895 | 203,0 | - | | - |
| 4 393 961 | | | | | | |
| | 920 | 700 | 172.0-178.0 | 100 | 130.0-170.0 | 300 10 0-25 0 |
| | ••• | • • • • | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 15030-17030 | 300 13,0-23,0 |
| 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 27,0-33,0 |
| 4 394 017 | | | | | | |
| 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 21,0-27,0 |
| 4 394 020 | | | | | | |
| 249,0-257,0 | 725 | 600 | 258,0-264,0 | 100 | 130,0-170,0 3 | 300 19,0-29,0 |
| | delivery rod stop temp. 40°C (104°F) (2) cm²/1000 strokes 2 2 2 2 2 2 2 2 2 | ### AGE (104°F) (2) Breakaway (104°F) (2) Intermediate speed Inter | Seelivery Part Part Pa | Scalings Control Con | Cashivery Cash | Testical stope (100 strokes) 100 |

| C. Settings for Fuel Injection Pump wi | th Fitted Governor |
|--|--------------------|
|--|--------------------|

| Control | d delivery rod stop temp. 40°C (104°F) (2) | Breakaway | | Full-load (Control-re lest oil te | | @ | Starting idle switchir | fuel delivery 6 | Low id | e speed 5 |
|--------------|--|-----------|----------|--|----------------------------|------------|------------------------------|------------------|---|-----------|
| rev/min | 1 | rev/min | • | ev/min | cm ³ /1000 stro | kes | 1 | cm³/1000 strokes | rev/min | l j |
| | 3 | 3 | | | 13 | | 6 | 7 | 8 | - |
| AC-Nr | . 4 394 062 | | | | ٠ | | | | | |
| 800 | 113,0-119,0 | 820 | 6 | 00 | 102,0-10 | 8.0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| AC-Nr. | . 4 394 064 | | | | | - , - | , , , | ,. | • | 13,0 23, |
| 875 | 161,0-165,0 | 890 | 6 | 00 | 140,0-14 | 4.0 | 100 | 130,0-170,0 | 300 | 19.0-25. |
| AC-Nr. | 4 394 066 | | | | - | • | | ,. | | |
| 800 | 125,0-131,0 | 820 | 6 | 00 | 134,0-14 | 0,0 | 100 | 130,0-170-0 | 300 1 | 19.0-25. |
| AC-Nr. | 4 394 068 | | | | | - | | | | ,0,0 20, |
| 1025 | 192,0-198,0 | 1045 | 9(| 00 | 180,0-18 | 6,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25.0 |
| AC-Nr. | 4 394 070 | | | | | | | • | | |
| 1000 | 200,0-206,0 | 1020 | 80 | | 180,0-18 | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | | | 60 | 30 | 189,0-19 | 5,0 | | | | |
| | 4 394 072 | | | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | | | - | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 074 | | | | | | | | | |
| 025 | 230,0-236,0 | 1040 | 90 70 | | 207,0-213 | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 076 | | | | | | | | | |
| 000 | 227,0-233,0 | 1020 | 80 | 0 | 197,0-203 | 3,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 078 | | | | | | | • | • | |
| 000 | 235,0-241,0 | 1020 | 70 | 0 | 263,0-269 | 9,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 080 | | | | | | | | | · |
| 000 | 220,0-226,0 | 1020 | 80 | | 209,0-215 | | 100 | 130,0-170,0 | 300 1 | 9,0,25,0 |
| - •• | | | 60 | U | 227,0-233 | ,0 | | | | |
| C-Nr. 910 | 4 394 082 190,0 | 020 | | | | | 400 | 400 0 100 | | |
| | | 930 | • | | - | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| | 4 394 084 160,0-166,0 | 920 | 700 | . | 120 0-445 | ^ | | 400 0 400 0 | | |
| | | 320 | 700 | , | 139,0-145 | , 0 | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| | 4 394 086 124,0-130,0 | 620 | | | _ | | 100 | 420 0 470 0 | ••• | |
| | | OLU | _ | | _ | | 100 | 130,0-170,0 | 300 1 <u>9</u> | ,u-25,0 |
| | 4 394 088 127,0-133,0 | 720 | 600 |) 1 | 24,0-130 | n | 100 | 120 0 470 0 | 200 4- | |
| | · | 120 | | , | 14 ₉ 0-130 | , U | 100 | 130,0-170,0 : | 300 1 <u>9</u> | ,0-25,0 |
| | 4 394 090 139,0-145,0 | 820 | 600 |) (| 24,0-130 | 0 | 100 | 120 0 470 0 4 | 200 40 | |
| | ,0 | 020 | 000 | , , | 24,0-130 | , U | 100 | 130,0-170,0 | 3UU 19 | ,0-25,0 |

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| | | | | | _ |
|---|----------|-----------------|--------------------|---------------|------------|
| _ | A 4 1 | # ** 1 1 | jection Pum | !46 [744] | C |
| | CATTINAG | TAT LIIAL IA | IOCTION LAIM | n with Pitter | LEAVERTAGE |
| | | IUI I USI NI | rocurii puiii | | WITHIN |
| • | | | | | |

| | mp. 40°C (104°F) (2) |) intermediate aper | ed | Control-re Test oil te | xx 8800 mp. 40°C (104°F) | <u>@</u> | idie switchir | g point | 1 | Control rod |
|--|-------------------------------|---|------------|---------------------------|-----------------------------|----------|------------------|------------------|---------|--------------|
| LEA/WIN | cm ³ /1000 strokes | rev/min | (9) | rev/min | cm ³ /1000 stro | kes | rev/min | cm²/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | | 1 | 2 | | 6 | 7 | 8 | 9 |
| , | 4 204 200 | | | | | | | | | |
| - | 4 394 092 | OAE | | 000 | 445 0 45 | | 400 | 420 0 470 0 | 202 | |
| 925 | 157,0-163,0 | 945 | | 800 6 00 | 145,0-15 ¹ | - | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. | 4 394 094 | | | | | | | | | |
| 1000 | 180,0-186,0 | 1020 | 8 | 300 | 154,0-160 | 0.0 | 100 | 130,0-170,0 | 300 1 | 9.0-25. |
| , | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 700 | 142,0-148 | - | | ,,.,. | | J,U 20, |
| 1C-Nr. | 4 394 096 | | | | | | | | | |
| 1050 | 207,0-213,0 | 1070 | | 900 | 161,0-175 | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | | | 8 | 300 | 147,0-153 | 3,0 | | | | |
| | 4 394 098 | | | | | | | | | |
| 900 | 187,0-193,0 | 920 | 7 | 700 | 162,0-168 | 3,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| | 4 394 100 | | | | | | | | | |
| 900 | 200,0-206,0 | 920 | 7 | 700 | 184,0-190 | 0,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| .c-Nr. | 4 394 102 | | | | | | | | | |
| 900 | 203,0-209,0 | 920 | 7 | 700 | 209,0-215 | 5,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 104 | | | | | | | | | |
| 750 | 185,0-191,0 | 770 | 6 | 00 | 222,0-228 | 3,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 106 | | | | | | | | | |
| 800 | 210,0-218,0 | 820 | 6 | 00 | 223,0-229 | ,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 108 | | | | | | | | • | |
| 050 | 222,0-228,0 | 1070 | | 00 | 202,0-208 | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | | • | 7 | 00 | 207,0-213 | ,0 | | | | |
| C-Nr. | 4 394 110 | | | | | | | | | |
| 000 | 240,0-246,0 | 1020 | | | 224,0-230 237,0-243 | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| . | | | Ū | 00 | 237,0-243 | ,0 | | | | |
| | 4 394 112 | 1070 | _ | 00 | 004 0 000 | ^ | 400 | 400 0 470 0 | | |
| 050 2 | 245,0-251,0 | 1070 | | | 224,0-230 237,0-243 | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. 4 | 4 394 114 | | | | | | | | | |
| | 217,0-223,0 | 1020 | 8 | 00 | 197,0-203 | ,0 | 100 | 130,0-170,0 | 300 19 | 9.0-25.0 |
| | .• | | 6 | | 219,0-225 | | | | •• | ,,, |
| C-Nr. 4 | 1 394 116 | | | | | | | | | |
| 900 2 | 210,0-216,0 | 920 | 7 | 00 | 212,0-218 | ,0 | 100 | 130,0-170,0 | 300 27 | ,0-33,0 |
| J-Nr. 4 | 1 394 118 | | | | | | | | | |
| 050 2 | 269,0-275,0 | 1070 | Q | 00 | 281,0-287 | _ n | 100 | 130,0-170,0 | 200 1C | 0-25 0 |

Testoil-ISO 4113

Tr

| C. Sett | ngs for Fu | el Injection I | Pump with | Fitted Governor |
|---------|------------|----------------|-----------|------------------------|
|---------|------------|----------------|-----------|------------------------|

| Full-load (Control-re Test oil te | delivery od stop mp. 40°C (104°F) 2 | Breakaway (25) | Control-ro | | Starting Idle switchin | | Low idl | Control roo |
|--|---|----------------|---------------|----------------------------|------------------------------|-------------------------------|---------|-------------|
| rev/min | cm³/1000 strokes | rev/min 44 | rev/min | cm³/1000 strokes | | cm ³ /1000 strokes | rév/min | |
| 1 | 2 | 3 | ' | 2 | 6 | 7 | 8 | • |
| C-Nr. | 4 394 120 | | | | | | | |
| 050 | 234,0-240,0 | 1070 | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 122 | | | | | | | |
| 050 | 262,0-268,0 | 1070 | 900 700 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 124 | | | | | | | |
| 050 | 241,0-247,0 | 1070 | 900 700 | 265,0-271,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 4 394 126 | | | | | | | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 128 | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 130 | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 132 | | | | | | | |
| 000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 134 | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 394 136 | | | | | | • | |
| 000 | 255,0-261,0 | 1020 | 800 600 | 272,0-278,0 270,0-276,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 138 | | | | | | | |
| 050 | 239,0-245,0 | 1070 | 900 700 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 140 | | | | | | | |
| 000 | 215,0-221,0 | 1020 | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 142 | | | | | | | |
| 900 | 222,0-228,0 | 920 | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 144 | | | | | | | |
| 050 | 257,0-263,0 | 1070 | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 394 148 | | | | | | | |
| 050 | 295,0-303,0 | 1075 | 900 | 309,0-315,0 | 100 | 130,0-170,0 | 300 3 | 2E 0 |

| Full-load of Control-ro | d stop | Breakaway | Control | roct stoo | Idle | fuel delivery 6 | Low idl | e speed 5 |
|----------------------------|------------------------------------|-----------------------|--------------|------------------------------------|--------------|------------------------------------|--------------|-----------------------|
| | mp. 40°C (104°F) (2) | intermediate ape | Test out | emp. 40°C (104°F) | switchin | | | Control rod travel |
| rev/min 1 | cm ³ /1000 strokes 2 | rev <i>i</i> min 3 | rev/min 1 | cm ³ /1000 strokes 2 | rev/min 6 | cm ³ /1000 strokes 7 | rev/min 8 | 9 <u>9</u> |
| | 1 201 150 | 1 | | | | | J | |
| | 4 394 150 | 4070 | 000 | 074 0 000 0 | 400 | 420 0 470 0 | 200 | 40 0 05 |
| 1050 | 268,0-274,0 | 1070 | 900 700 | 274,0-280,0 280,0-286,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| NC-Nr. | 4 394 152 | | | | | | | |
| 050 | 262,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 154 | | | | | | | |
| 050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 156 | | | | | | | |
| 050 | 296,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 158 4 394 157 | | | | | | | |
| 050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 160 | | | | | | | |
| 050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 162 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 164 | | | | | | | |
| 925 | 176,0-182,0 | 945 | 800 700 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 166 | | | | | | | |
| 900 | 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 168 | | | | | | | |
| 925 | 237,0-243,0 | 945 | 800 700 | 251,0-257,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 394 170 | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 27,0-33 |
| C-Nr. | 4 394 176 | | | | | | | |
| 050 | 213,0-219,0 | 1070 | 900 700 | 212,0-218,0 240,0-246,0 | 100 | 130,0-170,0 | 300 1 | 19,0-25, |

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| C. | Settings | for | Fuel In | jection | Pump | with | Fitted | Governor |
|----|----------|-----|---------|---------|------|------|---------------|----------|
|----|----------|-----|---------|---------|------|------|---------------|----------|

| Full-load d Control-ro Test oil ten | d stop | intermediate speed | high idle (| very characteristics (5a) | Starting Idle switching | • 0 | Low idle | Speed 5 Control rod |
|---|------------------|--------------------|-------------|-------------------------------|-------------------------------|-------------------------------|-----------|------------------------|
| rev/min | cm³/1000 strokes | rev/min (4) | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min) | mm . |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | 1 | | | | 1 | | 1 | |

AC-Nr. 4 394 246

1050 211,0-220,0

1055-1075 975 237,5-247,0 258,5-269,5

100 130,0-170,0 300 19,0-25,0

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700 600 255,5-266,0

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

| 700 | 246,0 |
|-----|-------|
| 600 | 263.0 |

720

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 250

1050 244,5-254,5 1060-1080

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 257

600 258,0 100 130,0-170,0 300 27,0

AC-Nr. 4 394 314

1050 246,0 900 240,0

1070

1070

1070

100 130,0-170,0 300 19,0-25,0

700 267,0

AC-Nr. 4 394 331

1050 241,0-247,0 900 265,0-271,0

100 130,0-170,0 300 19,0-25,0

700 268,0-274,0

AC-Nr. 4 394 332

1050 268,0-274,0 274,0-280,0 900

130,0-170,0 300 19,0-25,0

700 280,0-286,0

AC-Nr. 4 394 347

1050 269,0-275,0 900 281,0-287,0

1070

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 348

700

700

1050

1050

700

900

1050 234,0-240,0 1070 900 246,0-252,0 268,0-274,0

293,0-299,0

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 349

208,0-214,0

1070

100

130,0-170,0 300 19,0-25,0

700 260,0-266,0

AC-Nr. 4 394 350

262,0-268,0 279,0-285,0 900

289,0-295,0

230,0-236,0

1070

130,0-170,0 300 19,0-25,0

| . Settings for I | Fuel Injection Pum | p with Fitted Governor |
|------------------|---------------------------|------------------------|
|------------------|---------------------------|------------------------|

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| Control | d delivery rod stop | Breakaway | | | Idle | | Low ic | lle speed 5 | | |
|--------------|----------------------------|------------------|-----|---------|------------------------------------|---------|-----------------|-------------|----------------|--|
| | temp. 40°C (104°F) (2 | intermediate ape | | | | | awitching point | | Control root | |
| LEA/LUIU | ł . | rev/min 3 | (4) | rev/min | cm ³ /1000 strokes 5 | rev/min | | rev/mi | mm | |
| | 2 | 1 | | - | 3 | 6 | 7 | 8 | 19 | |
| AC-Nr | . 4 394 351 | | | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| 900 700 | 252,0-258,0 269,0-275,0 | | | | | | | | | |
| AC No | • | | | | | | | | | |
| AC-Nr. | | 4070 | | | | | | | | |
| 1050 900 | 262,0-268,0 267,0-273,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| 700 | 267,0-273,0 | | | | | | | | | |
| AC-Nr. | . 4 394 353 | | | | | | | | | |
| 050 | 279,0-285,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 | |
| 900 700 | 283,0-289,0 293,0-299,0 | | | | | | ,. | | 15,0 25 | |
| | • | | | | | | | | | |
| | 4 394 354 | | | | • | | | | | |
| 050 900 | 296,0-302,0 301,0-307,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| 700 | 309,0-315,0 | | | | | | | | | |
| C-Nr. | 4 394 356 | | | | | | | | | |
| 050 | 246,0 | 1070 | | | | 100 | 130,0-170,0 | 200 | 10 0 05 | |
| 900 | 240,0 | | | | | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| 700 | 267,0 | | | | | | | | | |
| C-Nr. | 4 394 386 | | | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | | 100 | 130,0-170,0 | 300 | 25,0 | |
| C-Nr. | 4 394 390 | | | | | | | | | |
| 900 | 259,0-267,0 | 925 | | | | 100 | 130,0-170,0 | 300 | 19 11-29 | |
| 700 | 238,0-246,0 | | | • | | | 100,0 1,0,0 | 500 | 13,0-23, | |
| C-Nr. | 4 394 428 | | | | | | | | | |
| 000 | 188,0-196,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 25.0 | |
| 300 | 180,0-187,0 | | | | | | | | , | |
| C-Nr. | 4 394 473 | | | | | | | | | |
| 350 | 189,0-197,0 | 875 | | | - | 100 | 130,0-170,0 | 325 3 | 80.0 | |
| 750 | 185,0-193,0 | | | | | | | | , | |
| -Nr. | 4 394 501 | | | | | | | | | |
| 000 | 175,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 9.0-25. | |
| '00 | 158,0 | | | | | | | | -,, | |
| -Nr. | 4 394 521 | | | | | | | | - | |
| | 239,0-247,0 | 1025 | | | | 100 | 130,0-170,0 3 | 300 2 | 5,0 | |
| 00 | 229,0-235,0 | | | | | | • • | | . - | |
| -Nr. | 4 394 527 | | | | | | | | | |
| | 161,0 | 925 | | | | 100 | 130,0-170,0 3 | 00 1 | 9,0-25.0 | |
| 00 | 151,0 | | | | | | | | , | |

| C. | Settings for | ruel injection | Pump with | Fitted Governor |
|----|--------------|----------------|------------------|------------------------|
|----|--------------|----------------|------------------|------------------------|

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| Full-load of Control-ro Test oil te | | Breakaway 20 | Fuel delic high ide i | very characteristics (5e) | Idle | fuel delivery 6 | Low id | le speed 5 |
|---|---|--------------|--------------------------|----------------------------|-----------------|------------------------------------|----------------|---------------------|
| rev/min | cm³/1000 strokes | rev/min 4 | J | | | cm ³ /1000 strokes 7 | reiv/mun B | travel |
| AC-Nr. | 4 394 541 | , | 1 | 1 | | | 1 | 1 1 |
| 1050 | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 550 | | | | | | | |
| 1000 | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 561 | | | | | | | |
| 1050 900 | 258,0 256,0 | 1060-1080 | | • | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 564 | | | | | | | |
| 1050 900 | 244,0 234,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. 1000 | 4 394 569 203,0-211,5 | 1010-1030 | | | 400 | 400 0 470 0 | | |
| | | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 050 | 4 394 590 260,5-271,0 | 1060-1080 | | | 100 | 130,0-170,0 | 200 | 10 0 05 |
| | ing of movemen | | 45 bar | at 750 PRM a | | | | |
| IC-Nr. | 4 394 593 | · | | | | | | |
| 050 | 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 394 703 | • | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | 900 700 | 267,0-278,0 267,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| btain | top part posit mean curve ab essure, gap sh | ove. Beginni | n quant ng of i | tity at 1050 l | PRM. / 0 - 0 | Adjust stop p ,45 bar at 75 | art p 0 PRM | osition I and 0, |
| | 4 394 705 4 394 706 | | | | | | | |
| | 258,0 256,0 | 1060-1080 | • | | 100 | 130,0-170 | 300 1 | 19,0-25, |
| C-Nr. | 4 394 707 | | | | | | | |
| | 244,0 234,0 | 1070 | • | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. 4 | 4 394 718 | | | | | | | |
| | 198,0-213,0 196,0-210,0 | 965-975 | | | 100 | 130,0-170,0 | 300 2 | 1,0-27,0 |
| -Nr. 4 | 394 719 | | | | | | | |
| | 166,0-168,0 142,5-146,5 | 915 | | | 100 | 130,0-170,0 | 300 2 | 1,0-27,0 |
| | 394 733 | | | | | | | |
| 00 2 | 255,0-261,0 272,0-278,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 270,0-276,0 | To | etoi | I-ISO 4° | 140 | | | |

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| _ | | 1 lo | in aliam Duman M | ink entag (Savathar |
|----|----------|---------------|------------------|---------------------|
| ~ | Cattings | TAT HIM KI | wation fully w | ith Fitted Governor |
| L- | Serrings | 101 1 401 *** | | |

| C. Se | ttings for Fu | lei injection | | | u Go | | Low idl | e somed |
|--|---|--------------------|-----------------|------------------------------------|--|------------------|------------|----------|
| Full-load delivery Control-rod stop | | Breakaway 20 | high idea speed | | Starting fuel delivery 6 Idle switching polist | | Control to | |
| Test oil ten | np. 40°C (104°F) (2) | intermediate speed | | 1 | 1 | cm3/1000 strokes | rev/min i | tranet |
| rev/min | cm ³ /1000 strokes | rev/min 40 | sev/min | cm ³ /1000 strokes 5 | 1 1 | 7 | 8 | • |
| | 2 | | | | 1 | | } | 1 |
| AC-Nr. | 4 394 740/741 | | | | | | | |
| 1020 915 | 213,0-226,0 208,0-218,0 | 1030-1040 | | | | | | |
| AC-Nr. | 4 394 744 | | | | | | | |
| 1050 900 | 250,0 256,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 745 | | | | | | | • |
| 950 750 | 208,0-214,0 196,0-202,0 | 990 | | | 100 | 130,0-170,0 | 300 | 21,0-27 |
| AC-Nr. | 4 394 746 | | | | | | | |
| 875 600 | 161,0-165,0 140,0-144,0 | 890 | | | 100 | 130,0-170, | 300 | 19,0-25 |
| AC-Nr. | 4 394 771 | | | | | | | |
| 800 600 | 113,0-119,0 102,0-108,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 773 | | | | | | | |
| 800 600 | 125,0-131,0 134,0-140,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 775 | | | | | | | |
| 1025 | 192,0-198,0 | 1045 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 | 180,0-186,0 | | | | | | | |
| AC-Nr. | 4 394 777 | | | | | | a- | 40 0 05 |
| 1000 800 600 | 200,0-206,0 180,0-186,0 189,0-195,0 | 1020 | | | 100 | 130,0-170, | 0 300 | 19,0-25 |
| AC-Nr. | 4 394 779 | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | • | | 100 | 130,0-170, | 0 300 | 19,0-25 |
| AC-Nr. | 4 394 781 | | | | | | | |
| 1025 900 | 230,0-236,0 207,0-213,0 | 1040 | • | | 100 | 130,0-170, | 0 300 | 19,0-25 |
| 700 | 209,0-215,0 | | | | | | | |
| | 4 394 783 | 4000 | | | 100 | 130,0-170, | U 3UU | 10 0-25 |
| 1000 800 | 227,0-233,0 197,0-203,0 | 1020 | | | 100 | 130,0-170, | J 300 | 13,0-23 |
| AC-Nr. | 4 394 785 | | | | | | | 40 2 2= |
| 1000 700 | 235,0-241,0 263,0-269,0 | 1020 | | | 100 | 130,0-170, | 0 300 | 19,0-25 |
| | | | | | | | | |

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| | | | $\overline{}$ | 6 | Low idle speed | 71 1 |
|-------------|-----------|--------------------|-------------------------|--------------------------|----------------|--------|
| rery | Breakaway | (2b) Fuel delivery | cheracteristics (50) St | erting fuel delivery (6) | Low idle speed | ול ולפ |

| C. Se | ttings for Fu | el Injectio | n Pum | p with Fitte | d Go | vernor | | |
|---------------------------|---|--------------------|----------|-------------------------------|------------|------------------|---------------|---------------------------------------|
| Full-load o | | Breakaway (| Fuel del | very characteristics (5e | Starting l | fuel delivery 6 | Low id | e speed 5 |
| Control-ro Test oil te | nd stop mp. 40°C (104°F) 2 | intermediate speed | ngn as | epood ® | switchin | g point | | Control rad |
| rev/min | cm³/1000 strokes | rev/min | Prev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | |
| 1 | 2 | 3 | | 5 | 6 | 7 | 8 | • |
| | 1 | • | • | • | • ' | | • | • : |
| IC-Nr. | 4 394 787 | | | | | | | |
| 1000 800 600 | 220,0-226,0 209,0-215,0 227,0-233,0 | 1020 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 789 | | | | | | | |
| 910 | 190,0 | 930 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| - | - | | | | | | | |
| | 4 394 791 | 200 | | | 100 | 130,0-170,0 | 200 | 10 0-25 |
| 900 700 | 160,0-166,0 139,0-145,0 | 920 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Mr. | 4 394 793 | | | | | | | |
| 600 | 124,0-130,0 | 620 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| o No | 4 204 705 | | | | | | | |
| | 4 394 795 | 700 | | | 100 | 130,0-170,0 | 200 | 10 0-25 |
| 700 600 | 127,0-133,0 124,0-130,0 | 720 | | | 100 | 130,0-170,0 | 300 | 13,0-23, |
| C-Nr. | 4 394 797 | | | | | | | |
| 800 | 139,0-145,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 124,0-130,0 | | | | | | | |
| C-Nr | 4 394 799 | | | | | | | |
| | | 945 | | | 100 | 130,0-170,0 | 300 | 19.0-25. |
| <u>ე</u> 25 300 | 157,0-163,0 145,0-151,0 | 343 | | | 100 | 130,0 170,0 | 300 | 13,0 23 |
| 900 | 134,0-140,0 | | | | | | | |
| -'-Nr. | 4 394 801 | | | | | | | |
| | 180,0-186,0 | 1020 | | | 100 | 130,0-170,0 | 300 | 19.0-25. |
| | 154,0-160,0 | 1020 | | | .00 | . 100,0 110,0 | | , , , , , , , , , , , , , , , , , , , |
| 700 | 142,0-148,0 | | | | | | | |
| IC-Nr. | 4 394 803 | | | | | | | |
| 1050 | 207,0-213,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 | 161,0-175,0 | | | | | | | |
| 80¢ | (47,0-153,0 | | | | | | | |
| C-Nr. | 4 394 805 | | | | | | | |
| 900 | 187,0-193,0 | 920 | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| 700 | 162,0-168,0 | | | | | - | | |
| C_N= | 4 394 807 | | | | | | | |
| | | 020 | | | 100 | 120 0_170 0 | . 3 UU | 27 1-22 |
| 900 700 | 200,0-206,0 184,0-190,0 | 920 | | | 100 | 130,0-170,0 | 300 | ∠/ ,U=33, |
| | | | | | | | | |
| C-Nr. | 4 394 809 | | | | | | | |
| 900 | 203,0-209,0 | 920 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 209,0-215,0 | | | | | | | |
| | | | | | | | | |

| Full-load delivery | | Breakaway | ② | 20 Fuel delivery characteristics (56 | | Starting | Starting fuel delivery 6 | | Low idle speed 5 | |
|---|---|-----------------|----------------|--------------------------------------|-------------------------------|----------|-------------------------------|---------|------------------|--|
| Control-rod stop Test oil temp. 40°C (104°F) | | intermediate ap | rmediate speed | high ide speed (3) | | switchin | g point | | Control rod | |
| rev/miņ | cm ³ /1000 strokes | rav/min | (49) | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | mm | |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | - | |
| | 1 | • | ' | • | • | • | • | | • | |
| | 4 394 811 | | | | | 400 | 400 0 470 0 | | 40 0 05 | |
| 750 600 | 185,0-191,0 222,0-228,0 | 770 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 813 | | | | | | | | | |
| 800 600 | 210,0-218,0 223,0-229,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 815 | | | | | | | | | |
| 900 700 | 222,0-228,0 202,0-208,0 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| lC-Nr. | 4 394 817 | | • | | | | | | | |
| 1000 | 240,0-246,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 | |
| 800 600 | 224,0-230,0 237,0-243,0 | .020 | | | | | , | | ,. | |
| C-Nr. | 4 394 819 | | | | | | | | | |
| 050 900 700 | 245,0-251,0 224,0-230,0 237,0-243,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| IC-Nr. | 4 394 821 | | | | | | | | | |
| 000 800 600 | 217,0-223,0 197,0-203,0 219,0-225,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 823 | | | | | | | | | |
| 900 700 | 210,0-216,0 212,0-218,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 | |
| C-Nr. | 4 394 825 | | | | | | | | | |
| 050 900 700 | 269,0-275,0 281,0-287,0 293,0-299,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 827 | | | | | | | | | |
| | 234,0-240,0 246,0-252,0 268,0-274,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 829 | | | | | | | | | |
| 050 | 262,0-268,0 279,0-285,0 289,0-295,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 831 | | | | | | | | | |
| 050 900 | 241,0-247,0 265,0-271,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |

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| C. | Settings | for Fuel In | jection | Pump with | Fitted Governor |
|----|----------|-------------|---------|------------------|-----------------|

-17-

| C. S | ettings for Fu | | | | | | | Low idl | e speed a |
|--------------------|---|-------------------------------|-------|------------------|-------------------------------------|--------------------------------|-------------------------------|----------|-----------------------------|
| Control- | delivery rod stop | ì | high | delive De api | ry characteristics (5e) sed (5b) | Starting i idle switchin | On Convers | | الا |
| 1 . | James 2000 (104°F) (2) | internediate speed rev/min | revin | | :m ³ /1003 strokes | | cm ³ /1000 strokes | rety/min | Control rod travel mm |
| rev/min | cm ³ /1000 strokes | 3 | 4 | | | 6 | 7 | 8 | 9 |
| | | 1 | 7 | | | - | | 1 (| 1 |
| AC-Nr. | 4 394 833 | | | | | | | | |
| 900 700 | 232,0-238,0 253,0-259,0 | 920 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 835 | | | | | | | | • |
| 750 700 | 244,0-250,0 253,0-259,0 | 770 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 837 | | | | | | | | |
| 800 600 | 239,0-245,0 248,0-254,0 | 820 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 839 | | | | | | | | |
| 1000 800 | 212,0-218.0 230,0-236,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 841 | | | | | | | | |
| 900 700 | 288,0-294,0 287,0-293,0 | 920 | | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| | 4 394 843 | | | | | | | | |
| 1000 800 600 | 255,0-261,0 272,0-278,0 270,0-276,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 845 | | | | | | | | |
| 1050 900 700 | 239,0-245,0 233,0-239,0 273,0-279,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 847 | | | | | | | | |
| 1000 800 600 | 215,0-221,0 197,0-203,0 220,0-226,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 849 | | | | | | | | |
| 900 700 | 222,0-228,0 254,0-260,0 | 920 . | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 851 | | | | | | | | |
| 1050 750 | 257,0-263,0 272,0-278,0 | 1070 | | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| | 4 394 853 | - | | | | | | | |
| 1050 900 | 295,0-303,0 309,0-315,0 | 1075 | | | | 100 | 130,0-170,0 | 300 2 | 5 . 0 |
| | 4 394 857 | | | | | | | | |
| 1050 900 | 262,0-268,0 267,0-273,0 | 1070 | | | | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| 700 | 267,0-273,0 | T | acto | ٠il. | ISO 41 | 12 | 1 | | |

F17

-18-

| Full-load Control- | rod stop | | (20) Fuel deal | very characteristics (56 apped (50) | | | Low idl | e speed 3 |
|-----------------------|---------------------------------------|--------------|----------------|--|-----|-------------------------------|----------|-------------------|
| • | emp. 40°C (104°F) (2 | / I | \sim 1 | 1 - | 1 | ng point | | Control re |
| rev/min 1 | cm ³ /1 000 strokes | rev/min | rev/min | cm ³ /1000 strokes | | cm ² /1000 strokes | reiv/min | mm O |
| · | | | | | - | | 8 | • |
| | 4 004 004 | | | | | | | |
| - | 4 394 861 | | | | | | | |
| 050 | 296,0-302,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| 900 700 | 301,0-307,0 309,0-315,0 | | | | | | | |
| | | | | | | | | |
| C-Nr. | | | | | | | | |
| 050 900 | 253,0-256,0 252,0-258,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| 700 | 269,0-275,0 | | | | | | | |
| | | | | | | | | |
| | 4 394 865 | 4070 | | | 400 | 400 0 450 0 | 200 - | |
| 050 900 | 208,0-214,0 230,0-236,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| 700 | 260,0-266,0 | | | | | | | |
| ^_Nim | 4 394 867 | | | • | | | | |
| | | 020 | | | 400 | 400 0 470 0 | 200 4 | |
| 900 700 | 181,0-187,0 172,0-178,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| | - | | | | | | | |
| | 4 394 869 | | | | | | | |
| 925 800 | 176,0-182,0 162,0-168,0 | 945 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| 700 | 177,0-183,0 | | | | | | | |
| · Also | A 20A 074 | | | | | | | |
| | 4 394 871 | 000 | | | | | | |
| 00 800 | 173,0-179,0 160,0-166,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| | • | | | | | | | |
| | 4 394 873 | | | | | | | |
| | 237,0-243,0 251,0-257,0 | 945 | | | 100 | 130,0-170,0 | 300 2 | 7,0-33 |
| | 269,0-275,0 | | | | | | | |
| | 4 394 875 | | | | | | | |
| | | 720 | | | 400 | 420 0 470 0 | 200 0 | 7 0 00 |
| | 218,0-224,0 240,0-246,0 | 720 | | | 100 | 130,0-170,0 | 3UU 2. | / , U-33 , |
| | | • | | | | | | |
| | 4 394 877 | | | | | | | |
| | 213,0-219,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 19 | 9,0-25, |
| | 212,0-218,0 240,0-246,0 | | | | | | | |
| | | | | | | | | |
| | 4 394 879 | | 255 | | | | | |
| 50 | 211,0-220,0 | 1055-1075 | 975 700 | 237,5-247,0 258,5-269,5 | 100 | 130,0-170,0 | 19,0-2 | 25,0 |
| | | | 600 | 255,5-266,0 | | | | |

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

| | | | | • | | |
|----|----------|---------|-------------|------------------|----------|---------|
| C. | Settings | for Fue | l Injection | Pump with | Fitted (| Sovemor |

-19-

| Full-load deinvery | | Breakaway 20 | | very characteristics (5a) | | fuel delivery 6 | Low id | le speed 5 |
|---|------------------|--------------------|-------------|------------------------------------|--------------|------------------------------------|---------------|-------------|
| Control-rod stop Test oil temp. 40°C | (104°F) (2) | intermediate speed | high idle a | 9 T | switchin | g point | | Control rod |
| i i | 0) strokes | rev/min 49 | rev/min | cm ³ /1000 strokes 5 | rev/min 6 | cm ³ /1000 strokes 7 | reiv/min 8 | |
| 1 2 | | 3 | - | 5 | | | | |
| | | | | | | | | |
| AC-Nr. 4 394 | | 700 | | | 400 | 400 0 470 0 | 200 | 40.0.05.0 |
| 700 246,0 600 263,0 | | 720 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 | 883 | | | | • | | | |
| 1050 244,5 | -254,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 | 885 | | | | | | | |
| 600 258,0 | | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| AC-Nr. 4 394 | 891 | | | | | | | |
| 600 167.0 | -175,0 | 620 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| AC-Nr. 4 394 | 893 | | | • | | | | |
| | -267,0 | 925 | | | 100 | 130,0-170,0 | 300 | 19,0-29,0 |
| 700 238,0 | -246,0 | | | | | | | |
| AC-Nr. 4 394 | • | | | | | | | |
| _ | -196,0 -187,0 | 1025 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| AC-Nr. 4 394 | 897 | | | | | | | |
| | -197,0 | 875 | | | 100 | 130,0-170,0 | 325 | 30,0 |
| - | -193,0 | | | | | | | |
| AC-Nr. 4 394 | | 005 | | | 400 | 400 0 470 0 | 200 | 40 0 05 0 |
| 900 175,0 700 158,0 | | 925 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 | 905 | | | | | | | |
| | -247,0 | 1025 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| 700 229,0 | -235,0 | | | | | | | |
| AC-Nr. 4 394 | 907 | | | | | | | |
| 900 161,0 800 151,0 | | 925 · | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| Beginning of | movemen | t: 0,40 - 0,4 | 5 bar | at 750 PRM a | nd | | | |
| | | ap should be | "020" | • | | | | |
| AC-Nr. 4 394 1050 202.0 | | 1060-1080 | | | 100 | 130,0-170,0 | 200 | 10 0-25 0 |
| • | -210,5 | 1000-1000 | | | 100 | 130,0-170,0 | 300 | 13,0763,0 |
| AC-Nr. 4 394 1000 230.5 | | 1010-1020 | | | 100 | 120 0-170 0 | 200 | 10 0-25 0 |
| | -239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 13,0~23,0 |
| AC-Nr. 4 394 | | 4040 4000 | | | 400 | 120 0 470 0 | 200 | 10 0 05 0 |
| 1000 203,0 | -211,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load di Control-roi Test oil ten | d stoo | intermediate speed | high ide i | very characteristics (5s peed (3) | Starting Idle switchir | | Low idl | e speed 5) Control rod |
|---|-------------------------------|--------------------|------------|-----------------------------------|------------------------------|------------------|---------|------------------------|
| rev/min | cm ³ /1000 strokes | rev/min , 4a | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

-20-

AC-Nr. 4 394 917

260.5-271.0 1050 1060-1080

100 130,0-170,0 300 19,0-25,0

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 919

215,5-261,5 1050

1060-1080

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 921

1050 260,5-271,0 1060-1080 900

267,0-278,0 100 130,0-170,0 300 19,0-25,0

700 267,0-278,0

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above. Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 925

1050 244,0 1070

100 130,0-170,0 300 19,0-25,0

900 234,0

AC-Nr. 4 394 997

900 173,0-179,0 800 160,0-166,0 920

100 130,0-170,0 300 19,0-25,0

Festoil-ISO 4113

Test Specifications Fuel Injection Pumps ① and Governors

40

WPP 001/4 ALO 16,0 a 1

En

PE 6 P 120 A 420 LS 152 0 401 846 239

1 - 5 - 3 - 6 - 2 - 4

RQV 300...875 PA 112 KR

supersede

companyAllis-Chalmers engine 16000-25000

Values only apply to test nozzle-and-holder assembly 0 681 443 022 and fuel-injection test tubing 9 681 230 703.

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2,8-2,9(2,75-2,95)mm (from BDC)

| Rotational speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm |
|--------------------------|----------------------------------|--|---|----------------------------------|--|---|
| 1000 | 12 | 26,4 - 27,1 | | | 1,0 | |
| 200 | 6 | 4,2 - 5,2 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rate | d speed | | Intermedial | e rated sp | ee d | Lower rated | speed | | Slidina s | leeve travei |
|----------------------|---------------------------|--|----------------------|------------|-----------------------|--------------------------|--------------------------|------------------------------------|--------------------------------------|------------------------------------|
| Degree of deflection | rev/min Control | L SEASI | Degree of deflection | | Control rod travel | Degree of deflection | | Control rod travel | | ① |
| of control | rod trave | rev/min (| of control lever | rev/min | mm 4 | of control lever 7 | rev/min 8 | mm 3 | rev/min 10 | п т 11 |
| 66° | 875 900 980 1060 | 15,0-17,0 12,0-15,4 3,2-8,0 0 | 4 | | | 10° | 120 200 350 550 | 6,3-8,0 4,9-7,1 1,7-3,1 0 | 0-160 350 700 980 - 1050 | Start 2,3-2,8 5,4-5,9 end |

Torque control travel a =

mn

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-roc Test oil terr | | Rotational-speed 20 limitation intermediate speed | Fuel delivingh idle s | rery characteristics (5a) | Starting Idle switchir | | Torque- travel | Control cod |
|--|------------------|---|-----------------------|-------------------------------|------------------------------|-------------------------------|-------------------|--------------|
| rev/min | cm³/1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |
| 1 | | | | | | | | |
| | | | | | | | | |
| | | | | | | | · | |
| | | | | | | | | |
| | | | | | 1 | • | | |
| | | | | : | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

BOSCH

| | ad delivery pi-rod stoo | Breaksway (| 20) Full-toe | d delivery rod stop | Starting | fuel delivery 6 | Low id | le speed 5 |
|--------|----------------------------|--------------------|--------------|-------------------------------|----------|------------------------------------|--------------|-------------|
| Test o | i temp. 40°C (104°F) (2) | intermediate speed | Teston | temp. 40°C (104°F) | awiichi | ng point | | Control rod |
| rev/m | n cm³/1000 strokes 2 | rev/min (| rev/min 1 | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes 7 | rév/mer 8 | 9 |
| 1 | | | | | 1 | | 1 | 1 |
| | . 4 320 754 | | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| | . 4 320 793 | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | . 4 320 815 | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC No. | 4 220 046 | | 000 | 11130-11730 | | | | |
| 900 | . 4 320 816 97,0-103,0 | 910-920 | 800 | 98,0-104,0 | 100 | 00 0 120 0 | 200 | 40 0 05 0 |
| | | 310-320 | 000 | 30,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| 1100 | 4 320 817 139,0-143,0 | 1120 | 800 | 149,0-154,0 | 100 | 00 0-120 0 | 275 | 0 0 10 0 |
| 1100 | 100,0 140,0 | 1120 | 600 | 153,0-161,0 | 100 | 90,0-130,0 | 3/5 | 9,0-19,0 |
| AC-Nr. | 4 320 829 | | | | | | | |
| 1100 | 139,0-143,0 | 1120 | 800 | 149,0-154,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| | | | 600 | 153,0-161,0 | | | | |
| | 4 320 933 | 4040 | 000 | 407 0 440 0 | | | | |
| 900 | 102,0-110,0 | 1040 | 800 | 107,0-116,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| | 4 320 939 | 4040 | 700 | | | | | |
| 900 | 98,5 <u>+</u> 3 | 1040 | 700 | 107,5 <u>+</u> 4 | 100 | 90,0-130,0 | 300 | 25,0 |
| | 4 320 940 | | | | | | | |
| 900 | 78,0- 86,0 | 1040 | 700 | 100,0-109,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| | 4 320 941 | 4040 | 700 | •• • • • • | | | | |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 10C | 90,0-130,0 | 300 1 | 9,0-25,0 |
| | 4 320 942 | 4000 | | ••• | | | | |
| 1000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 1 | 9,0-25,0 |
| | 4 320 980 | | | | | | | |
| 900 | 108,0-116,0 | 1120 | 800 | - | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| | 4 320 981 | | | | | | | |
| 900 | 111,0-119,0 | 1020 | 800 | 112,0-118,0 | 100 | 90,0-130,0 3 | 300 | 25,0 |
| | 4 321 016 | | | | | | | |
| 750 | | 1020 | 750 | 95,0-101,0 | 100 | 90,0-130,0 3 | 300 | 25,0 |
| | 4 321 064 | | | | | | | |
| 1000 | 112,0 | 1030 | 800 | 112,5 | 100 | 90,0-130,0 3 | 300 | 25,0 |
| | | | | | | | | |

| Full-load of Control-ro Test oil te | | Breakaway | Control | delivery (2 rod stop emp. 40°C (104°F) | Starting lidle switching | tuel delivery 6 | Low idl | e speed 5) Control rod |
|---|------------------|------------|------------|--|--------------------------|------------------|---------|------------------------|
| rev/min | cm³/1000 strokes | rev/min | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | • |
| | ł | ı | • | • | • ' | | • | • |
| C-Nr. | 4 359 816 | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107, 111,0-117, | | 90,0-130,0 | 300 | 19,0-25 |
| IC-Nr. | 4 359 826 | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 800 | 98,0-104, | 0 100 | 90,0-130,0 | 300 | 19,0-25 |
| IC-Nr | 4 359 828 | | | | | | | |
| 100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154, 153,0-161, | | 90,0-130,0 | 375 | 9,0-19 |
| IC-Nr | 4 359 830 | | | | | | | |
| 025 | 91,0- 93,0 | 1040 | 700 | 99,0-103, | 0 100 | 90,0-130,0 | 300 | 19,0-25 |
| | | | | | | • | | - |
| | 4 359 832 | 1020 | 700 | 126,0-130 | .0 100 | 90,0-130,0 | 300 | 10 0-25 |
| 000 | 122,0-124,0 | 1020 | 700 | 120,0-130, | .0 100 | 30,0-130,0 | , 500 | 13,0-23 |
| C-Nr. | 4 392 693 | | | | | | | |
| 050 | 205,0-215,0 | 1065-80 | 900 | 167,0-177 | ,0 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 695 | | | | | | | |
| 900 | 149,0-155,0 | 920 | - | - | | - | 300 | 19,0-25 |
| C Nu | 4 392 697 | | | | | | | |
| | | 770 | 600 | 222,0-228 | .0 100 | 130,0-170,0 | 300 | 19 0-25 |
| 750 | 185,0-191,0 | 770 | 000 | 222,0-220 | ,0 100 | 150,0-170,0 | , 300 | 13,0-23 |
| IC-Nr. | 4 392 699 | | | | | | • | |
| 800 | 210,0-218,0 | E20 | 600 | 223,0-229 | 0 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 701 | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215 | 0 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 703 | | | | | | | |
| 050 | 220,0-230,0 | 1060-70 | 900 | 200,0-210 | 0 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 220,0 200,0 | | 700 | 205,0-215 | | | | • |
| IC-Nr | 4 392 707 | | | | | | | |
| 050 | 243,0-253,0 | 1060-80 | 900 | 222,0-232 | 0 100 | 130,0-170,0 | 300 | 19.0-25 |
| | ,0,0 | . 300 00 | 700 | 235,0-245 | | | | , |
| C-Nr | 4 392 709 | | | | | | | |
| 000 | 217,0-223,0 | 1020 | 800 | 197,0-203 | .0 100 | 130,0-170, | 300 | 19.0-25 |
| JUU | 21/30-22330 | 1020 | 600 | 219,0-225 | | , | | , |
| C-N2 | 4 392 711 | | | | | | | |
| 600 | 231,0-237,0 | 620 | - | • | • | - | 300 | 19,0-25 |
| 550 | 20130-20/30 | V-V | | | | | | , |

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) (2) | | . 1 | _ Contr | Full-load delivery 2 Control-rad atop Test oil temp. 40°C (104°F) | | Starting fuel delivery 6 ldie switching point | | Low idle speed 5 | |
|---|--------------------------|-----------|------------|---|----------|---|--------|--------------------|--|
| rev/min | cm³/1000 strokes | rev/min (| ev/m | | 1 | cm ³ /1000 strokes | rev/mm | traval | |
| | 2 | 3 | | 2 | <u> </u> | 7 | 8 | • | |
| AC-Nr. | 4 392 715 | | | | | | | | |
| 1050 | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | | 130,0-170,0 | 300 | 19,0-25,0 | |
| 40 No | 4 200 747 | | 700 | 175,0-161,0 | | | | | |
| AC-Nr. 1050 | 4 392 717 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19.0-25.0 | |
| | 4 392 719 | | | ,. | , | | | ,,. | |
| 1050 | 200,0-206,0 | 1070 | 900 | 190,0-196,0 | | 130,0-170,0 | 300 | 19,0-25,0 | |
| | _ | | 700 | 214,0-220,0 | | | | | |
| | 4 392 721 | 4070 | 000 | 000 0 000 0 | 400 | 400 0 470 0 | 000 | | |
| 1050 | 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 392 723 | | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 392 725 | | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| | 4 392 727 | 026 | 700 | 252 0 250 0 | 400 | 120 0 170 0 | 200 | 40 0 05 0 | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. 1000 | 4 392 729 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19 0-25 0 | |
| | 4 392 731 | 1020 | 000 | 200,0 200,0 | 100 | 100,0 170,0 | 300. | 13,0-23,0 | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27.0-33.0 | |
| AC-Nr. | 4 392 735 | | | • • | | • | | | |
| 1050 | 239,0-245,0 | 1070 | 900 | 233,0-239,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| | | | 700 | 273,0-279,0 | | | | | |
| \C-Nr. 1000 | 4 392 737 215,0-221,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 200 | 10 0-25 0 | |
| 1000 | 213,0-221,0 | 1020 | 600 | 220,0-226,0 | 100 | 130,0-170,0 | 200 | 19,0-25,0 | |
| C-Nr. | 4 392 739 | | | | | | | | |
| 050 | 207,0-213,0 | 1050 | 900 700 | 195,0-201,0 225,0-231,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| \C_N <u>∽</u> | 4 392 741 | | , 00 | 2230 23130 | | | | | |
| 050 | 213,0-219,0 | 1070 | 900 | 202,0-208,0 | 100 | 130,0-170,0 | - | - | |
| | • | | 700 | 230,0-236,0 | | | | | |
| | 4 392 743 | | | | | | | | |
| 050 | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |

| | delivery | Breakaway (| | ull-load delivery 2 | | Starting fuel delivery 6 | | Low idle speed 5 | |
|---|-------------------------------|--------------------|-------------|-------------------------------|-----|--------------------------|---------|------------------|--|
| Control-rod stop Test oil temp. 40°C (104°F) 2 | | intermediate speed | Test oil te | | | awitching point | | Control rod | |
| rev/min | cm ³ /1000 strokes | rev/min (| len/win | cm ³ /1000 strokes | 1. | cm³/1000 strokes | rev/min | an an | |
| | - | | | 2 | 6 | ' | 8 | - | |
| AC-Nr | 4 392 747 | | | | | | | | |
| 1050 | 227,0-233,0 | 1070 | 900 | 208,0-214,0 | 100 | 130,0-170,0 | 300 | 10 0-25 0 | |
| 1030 | 227,0 233,0 | 1070 | 700 | 247,0-253,0 | 100 | 10030 17030 | 500 | | |
| AC-Nr. | 4 392 749 | | · | | | | | | |
| 1050 | 230,0-234,0 | 1070 | | _ | 100 | 130,0-170,0 | 300 | 19.0-25.0 | |
| | | | | | | ,. | | ,,. | |
| | 4 392 750 | 4070 | | | 100 | 430 0 470 0 | 200 | 40 0 05 0 | |
| 1050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 392 768 | | | | | | | | |
| 800 | 123,0-133,0 | 820 | 600 | 132,0-142,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 392 775/776 | | | | | | | | |
| 875 | 162,0-164,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 392 777 | | | | | | | | |
| 950 | 205,0-207,0 | 970 | 700 | 195,0-199,0 | 100 | 130,0-170,0 | 300 | 19.0-25.0 | |
| | | | , | | | , | | ,,. | |
| | 4 392 778 | 000 | 750 | 106 0 202 0 | 100 | 120 0 170 0 | 200 | 04 0 07 0 | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-2/,0 | |
| • | 3 392 779 | | | | | | | | |
| 1025 | 190,0-200,0 | 1030-40 | 1000 900 | 191,0-201,0 178,0-188,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| | 4 000 704 | | 300 | 170,0 100,0 | | | ٠ | | |
| | 4 392 781 | 4050 60 | 000 | 005 0 045 0 | 400 | 400 0 470 0 | | | |
| 1025 | 228,0-238,0 | 1050-60 | 900 700 | 205,0-215,0 207,0-217,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| A.C., N. | 4 392 953 | | | | | | | | |
| 940 _, | 185,0-195,0 | 955-65 | _ | _ | 100 | 120 0-170 0 | 200 | 10 0 25 0 | |
| | | 333-03 | _ | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| | 4 393 095 | | | | | | | | |
| 1050 | 211,0-221,0 | 1060-80 | 900 700 | 210,0-220,0 238,0-248,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| • • • • | | | ,,,, | 200,0 210,0 | | | | | |
| | 4 393 307 | 000 | 700 | 040 0 040 0 | 400 | 400 0 470 0 | | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 2 | 27,0-33,0 | |
| AC-Nr. | 4 393 431 | | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 | |
| | | | 700 | 200,0-200,0 | | | | | |
| | 4 393 821 | | | | | | | | |
| 1050 | 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| | | | , , , , | | | | | | |

| C. | Settings | tor rue | i infection | rump witi | n Fittea (| iovemor | • |
|----|----------|---------|-------------|-----------|------------|---------|---|
| | | | | | | | |
| | | | | | | | |

| F | ettings for Pu | | <u> </u> | | | fuel delivery 6 | Low id? | e speed |
|---------|------------------------------------|--------------------|------------|--|------------------|------------------|--------------|-------------------|
| Control | rod stop temp. 40°C (104°F) (2) | intermichate speed | Contro | id delivery 2 Frod stop I temp. 40°C (104°F) | idie switchin | • | | Control rod |
| rev/min | cm ² /1000 strokes | rev/min (| rev/mir | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | | 2 | 6 | 7 | 8 | - |
| | • | • | | • | | | | |
| | . 4 393 823 | | | | | | | |
| 1050 | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | . 4 393 825 | | | | | | | |
| 1050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | . 4 393 827 | | | | | | | |
| 1050 | 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 393 829 | | | | | | | |
| 1050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 393 831 | · | | • | | | | |
| 1050 | 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | 100 | 130,0-170,0 | - | - |
| AC-Nr. | 4 393 833 | | | | | | | |
| 1050 | 264,0 | 1060-1080 | 900 | 280,5 | 100 | 130,0-170,0 | 300 1 | 19.0-25.0 |
| | - | | | 200,0 | | .00,0 1,0,0 | 000 | 7,0 25,0 |
| 1050 | 4 393 835 220,0-226,0 | 1070 | 900 | 240 0 246 0 | 400 | 400 0 470 0 | 222 4 | |
| 1030 | 220,0-220,0 | 10/0 | 700 | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 1 | 9,0,25,0 |
| AC-Nr | 4 393 837 | | | | | | • | |
| 1050 | 227,0-233,0 | 1070 | 906 | 208,0-214,0 | 100 | 120 0 170 0 | 200.4 | 0 0 05 0 |
| 1000 | 22730 255,0 | 10/0 | 700 | 247,0-253,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 393 890 | | • | • | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 3 | 1 0 <u>-</u> 27 0 |
| | • | • | | ,. 202,0 | | 100,0 170,0 | 300 Z | |
| 955 | 4 393 891 208,0 | 065-075 | 905 | 202.6 | | | | |
| | - | 965-975 | 895 | 203,0 | - | | | - |
| | 4 393 961 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 001 | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 7.0-33.0 |
| AC-N× | 4 394 017 | | | | | | | ,,0 |
| 950 | 208,0-214,0 | 990 | 750 | 106 0_202 0 | 100 | 120 0 470 0 | 200 0 | 4 0 07 0 |
| | - | <i>33</i> 0 | / 50 | 196,0-202,0 | 100 | 130,0-170,6 | 300 2 | 1,0-27,0 |
| | 4 394 020 | | | | | | | |
| 700 | 249,0-257,0 | 725 | 600 | 258,0-264,0 | 100 | 130,0-170,0 | 300 1 | 9,0-29,0 |

G2

| _ | | | | | |
|---|----------|--------|---------------|----------------|-------------------|
| C | Settings | for Fi | lei Injection | Prima with | Fitted Governor |
| • | | | ioi myoonoi | in minib anion | I ILION MOTOLINGI |

-7-

| Control | d delivery Frod stop temp. 40°C (104°F) | Breakaway intermediate spi | → I Contr | and delivery of-rod stop ill temp. 40°C (104°F) | idle | tuel delivery 8 | Low idl | e speed 5 |
|---------|---|-------------------------------|------------|---|---------|------------------|----------------|--------------|
| rev/min | cm³/1000 strokes | rev/min | revim | in cm³/1000 strokes | rev/min | cm-V1000 strokes | rdv/min 8 | travel mm |
| | | 1 | | | 1 | <u> </u> | | |
| AC-Nr | . 4 394 062 | | | | | | | |
| 800 | 113,0-119,0 | 820 | 600 | 102,0-108,0 | 100 | 130,0-170,0 | 300 1 | 19 0-25 / |
| AC-Nr | . 4 394 064 | | | | ,,,, | ,. | | |
| 875 | 161,0-165,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 200 4 | 10 0 25 (|
| | • | | 000 | 140,0 144,0 | 100 | 150,0-170,0 | 300 (| 19,0-25,0 |
| 800 | . 4 394 066 125,0-131,0 | 820 | 600 | 124 0 440 0 | 400 | 400 0 450 0 | | |
| | | 020 | 600 | 134,0-140,0 | 100 | 130,0-170-0 | 300 1 | 9,0-25,0 |
| | . 4 394 068 | 4045 | 222 | | | | | |
| 1025 | 192,0-198,0 | 1045 | 900 | 180,0-186,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 070 | 4000 | | | | | | |
| 1000 | 200,0-206,0 | 1020 | 800 600 | 180,0-186,0 189,0-195,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr | 4 394 072 | | | ,. | | | | |
| 940 | 185,0-195,0 | 955-65 | | _ | 100 | 120 0 170 0 | 200 4 | 0 0 05 0 |
| | • | 300 00 | | _ | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 1025 | 4 394 074 230,0-236,0 | 1040 | 000 | 007 0 040 0 | 124 | 444 | | |
| 1025 | 230,0-230,0 | 1040 | 900 700 | 207,0-213,0 209,0-215,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 076 | | | | | | | |
| 1000 | 227,0-233,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 1 | 9-0-25-0 |
| AC-Nr. | 4 394 078 | | | | | | | -,0 20,0 |
| 1000 | 235,0-241,0 | 1020 | 700 | 263,0-269,0 | 100 | 130,0-170,0 | 300 10 | 0 N-25 N |
| AC-Nr. | 4 394 080 | | | 100,0 100,0 | | 100,0 170,0 | 5 00 1. | 9,0-29,0 |
| 1000 | 220,0-226,0 | 1020 | 800 | 209,0-215,0 | 100 | 120 0 470 0 | 200 44 | |
| | | ,020 | 600 | 227,0-233,0 | 100 | 130,0-170,0 | 300 15 | 9,0,25,0 |
| AC-Nr. | 4 394 082 | | | | | | | |
| 910 | 190,0 | 930 | - | - | 100 | 130,0-170,0 | 300 29 | 5.0 |
| AC-Nr. | 4 394 084 | | | | | | | ,,, |
| 900 | 160,0-166,0 | 920 | 700 | 139,0-145,0 | 100 | 130,0-170,0 3 | RAA 10 | 0 0-25 0 |
| AC-Nr. | 4 39\$ 086 | | | | | ,. | 700 13 | ,,,,,,,,, |
| 600 | 124,0-130,0 | 620 | - | _ | 100 | 130 0-170 0 3 | 000 40 | |
| | 4 394 088 | ~ ~ | | | . 50 | 130,0-170,0 3 | 19 | ,0-25,0 |
| | 127,0-133,0 | 720 | 600 | 124,0-130,0 | 100 | 120 0 470 0 0 | | |
| | - | 120 | | 124,0-130,0 | 100 | 130,0-170,0 3 | 19 | ,0-25,0 |
| | 4 394 090 | 022 | C00 | 404 0 405 5 | 4.00 | | | |
| 940 | 139,0-145,0 | 820 | 600 | 124,0-130,0 | 100 | 130,0-170,0 3 | 00 19 | ,0-25,0 |

| | | | | *** • | | - - | · | _ |
|----|-----------------|-----|-------------|-----------|--------|----------------|---------------|----------|
| C. | Settings | for | Fuel | Injection | a Pump | with | Fitted | Governor |

-8-

| Control | I delivery rod stop amp. 40°C (104°F) | Breakaway | Contro | ad delivery H-rad stop I temp. 40°C (104°F) | Idle | fuel delivery 6 | Low idl | e speed 5 Control roo |
|----------|---|-----------|------------|---|---------|------------------|---------|--------------------------|
| rev/min | cm³/1000 strokes | rev/min | rev/mi | | rev/min | cm³/1000 strokes | rév/min | travel mm |
| 1 | 2 | 3 | ! | 2 | 6 | 7 | 8 | 9 |
| 1 | • | • | • | • | • | • | • | • |
| NC-Nr. | 4 394 092 | | | | | | | |
| 925 | 157,0-163,0 | 945 | 800 600 | 145,0-151,0 134,0-140,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 094 | | | | | | | |
| 000 | 180,0-186,0 | 1020 | 800 700 | 154,0-160,0 142,0-148,0 | 100- | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 096 | | | | | | | |
| 050 | 207,0-213,0 | 1070 | 900 800 | 161,0-175,0 147,0-153,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 098 | | | | | | | |
| 900 | 187,0-193,0 | 920 | 700 | 162,0-168,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| C-Nr. | 4 394 100 | | | | | | | |
| 900 | 200,0-206,0 | 920 | 700 | 184,0-190,0 | 100 | 130,0-170,0 | 300 2 | 7.0-33. |
| C-N> | 4 394 102 | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 200 1 | 0 0-25 |
| | | 320 | 700 | 203,0-213,0 | 100 | 130,0-170,0 | 300 1 | 3,0-23, |
| | 4 394 104 | 770 | 600 | 222 2 222 2 | 400 | 400 0 470 0 | | |
| 750 | 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 106 | | | | | | | |
| 800 | 210,0-218,0 | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 108 | | | | | | | |
| 050 | 222,0-228,0 | 1070 | 900 700 | 202,0-208,0 207,0-213,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| . | | | 700 | 207,0-213,0 | | | | |
| | 4 394 110 | 4000 | 000 | 004 0 000 0 | 400 | 400 0 400 0 | | |
| 000 | 240,0-246,0 | 1020 | 800 600 | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 | 300 i | 9,0-25, |
| -Nr | 4 394 112 | • | | , - | | | | |
| | 245,0-251,0 | 1070 | 900 | 224,0-230,0 | 100 | 130,0-170,0 | 200 1: | 0 0-25 |
| | | | 700 | 237,0-243,0 | | 100,0 170,0 | JUU 1. | 3,0~23, |
| C-Nr. | 4 394 114 | | | | | | | |
| 000 | 217,0-223,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | • | | 600 | 219,0-225,0 | | | | , |
| -Nr. | 4 394 116 | | | | | | | |
| 000 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| -Nr. | 4 394 118 | | | | | | | |
| 50 | 269,0-275,0 | 1070 | 900 | 281,0-287,0 | 100 | 130,0-170,0 | 300 19 | 9,0-25.0 |
| | | | 700 | 293,0-299,0 | | • | • | |

G4

| | ettings for F | | | | | | 10-44 | le speed 5) |
|-------------------------------------|--|------------------------------|--|-------------------------------|---------|-------------------------------|--------------|--------------|
| Full-load Control- Test oil t | delivery rod stop smp. 40°C (104°F) (2 | Breakaway intermediate sp | 20 Full-load Control-r Test oil to | | Idie | fuel delivery (6) ng point | 10 | Control rod |
| rev/min | cm³/1000 strokes | rev/min | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min 8 | travel mm |
| | 2 | | | | - | , | ٦ | 1 |
| AC-Nr. | 4 394 120 | | | | | | | |
| 1050 | 234,0-240,0 | 1070 | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 122 | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 124 | | | | | | | |
| 1050 | 241,0-247,0 | 1070 | 900 700 | 265,0-271,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 126 | | | | | | | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 128 | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-N/2 | 4 394 130 | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 10 0-25 (|
| | | 020 | 000 | 240,0-254,0 | 100 | 130,0-170,0 | 300 | 13,0-23,0 |
| | 4 394 132 | 4020 | 000 | 220 0 226 0 | 100 | 120 0 170 0 | 200 | 40 0 05 / |
| 1000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25,1 |
| AC-Nr. | 4 394 134 | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| AC-Nr. | 4 394 136 | | | | | | • | |
| 1000 | 255,0-261,0 | 1020 | 800 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | 600 | 270,0-276,0 | | | | |
| AC-Nr. | 4 394 138 | | | | | | | |
| 1050 | 239,0-245,0 | 1070 | 900 | 233,0-239,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | 700 | 273,0-279,0 | | | | |
| | 4 394 140 | | | | | | | |
| 1000 | 215,0-221,0 | 1020 | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | 000 | 220,0 220,0 | | | | |
| | 4 394 142 | 666 | -06 | 054 0 055 5 | 400 | 400 0 470 0 | | |
| 900 | 222,0-228,0 | 920 | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 144 | | | | | | | |
| 1050 | 257,0-263,0 | 1070 | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| AC-Nr. | 4 394 148 | | | • | | | | |
| 1050 | 295,0-303,0 | 1075 | 900 | 309,0-315,0 | 100 | 130,0-170,0 | 300 | 25.0 |

| C. | Settings | for Fue | I Injection | Pump with | Fitted | Governor |
|----|-----------------|---------|-------------|------------------|---------------|----------|
|----|-----------------|---------|-------------|------------------|---------------|----------|

| Full-load (Control-re Test oil te | delivery and stop mp. 40°C (104°F) (2) | Breakaway | | Full-load d Control-roo Test oil ten | | Starting Idio | fuel delivery 6 | Low id | e speed 5 |
|--|--|-----------|---|--|-------------------------------|---------------|-------------------------------|---------|-------------|
| rev/min | cm³/1000 strokes | rev/min | ❷ | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travei |
| 1 | 2 | 3 | | 1 | 2 | 6 | 7 | 8 | 0 |
| 1 | ł | 3 | 1 | | 1 | į | 1 | ı | 1 1 |
| AC-Nr. | 4 394 150 | | | | • | | | | |
| 1050 | 268,0-274,0 | 1070 | | 900 700 | 274,0-280,0 280,0-286,0 | | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 152 | | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | | 900 700 | 257,0-273,0 267,0-273,0 | | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 154 | | | | | | | | |
| 1050 | 279,0-285,0 | 1070 | | 900 700 | 283,0-289,0 293,0-299,0 | | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 156 | | | | | | | | |
| 1050 | 296,0-302,0 | 1070 | | 900 700 | 301,0-307,0 309,0-315,0 | | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 158 4 394 157 | | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 160 | | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 162 | | | | | | | | |
| 900 | 181,0-187,0 | 920 | • | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 925 | 4 394 164 176,0-182,0 | 945 | | 800 700 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 166 | | | | | | | | |
| 900 | 173,0-179,0 | 920 | 8 | B00 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 168 | | | | | | | | |
| 925 | 237,0-243,0 | 945 | | 800 700 | 251,0-257,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| \C-Nr. 700 | 4 394 170 218,0-224,0 | 720 | 4 | 500 | 240 0-246 0 | 100 | 120 0-170 0 | 200 | 27 0 22 2 |
| 700 | £103U-2243U | /20 | (| JUU | 240,0-246,0 | 100 | 130,0-170,0 | 300 | ۵/ ,U-33 ,Ü |
| NC-Nr. | 4 394 176 | | | | | | | | |
| 050 | 213,0-219,0 | 1070 | | 900 700 | 212,0-218,0 240,0-246,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |

| C. (| Settings | for Fuel In | jection Pump | with Fitted | Governor |
|------|----------|-------------|--------------|-------------|----------|
|------|----------|-------------|--------------|-------------|----------|

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| Full-load delivery Control-rod stop | | Breakaway (2 | Fuel deli | Fuel delivery characteristics (Se) Se high ide speed (Sb) | | fuel delivery 6 | Low idl | e speed 5 |
|--|-------------------------------|--------------|-------------------|---|----------|-------------------------------|---------|--------------|
| Test oil te | emp. 40°C (104°F) 2 | 7 . | _ | (Se) | switchin | g point | | Control ro |
| rev/min | cm ³ /1000 strokes | rev/min (| revimin | cm ³ /1000 strokes | rav/min | cm ³ /1000 strokes | rev/min | travei mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| AC-Nx | . 4 394 246 | • | • | | | , | ' | |
| 1050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | } | 130,0-170,0 | 300 | 19,0-25 |
| Tilt | stop part posi | tion to obta | ain qua | ntity at 1050 | PRM. | | | |
| | t stop part po . 4 394 248 | Sition to of | otain m | ean curve abov | e. | | | |
| 700 | 246,0 | 720 | | | 400 | 120 0 170 0 | | 40 0 00 |
| 600 | 263,0 | 720 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr | 4 394 250 | | | | | | | |
| 1050 | 244,5-254,5 | 1060-1080 | | | 100 | 120 0-470 0 | 200 | 10 0 05 |
| | • | 1000-1000 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| _ | 4 394 257 | | | | | | | |
| 600 | 258,0 | | | • | 100 | 130,0-170,0 | 300 | 27,0 |
| C-Nr. | 4 394 314 | | | | | | | |
| 050 | 246,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 700 | 240,0 267,0 | | | | | | | |
| | • | | | | | | | |
| 050 | 4 394 331 | 4070 | | | 4.00 | | | |
| 900 | 241,0-247,0 265,0-271,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 268,0-274,0 | | | | | | | |
| C-Nr. | 4 394 332 | | | | | | | |
| 050 | 268,0-274,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 700 | 274,0-280,0 280,0-286,0 | | | | | | | |
| | | | | | | | | |
| | 4 394 347 . | 4070 | | | 455 | | | |
| 050 900 | 269,0-275,0 281,0-287,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| 700 | 293,0-299,0 | | | | | | | |
| C-Nr. | 4 394 348 | | | | | | | |
| 050 | 234,0-240,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | Q_N-2E |
| 900 | 246,0-252,0 268,0-274,0 | | | | | , 1 / 0 5 0 | JJJ 1 | J,U-20; |
| | • | | | | | | | |
| | 4 394 349 | | | | | | | |
| | 208,0-214,0 230,0-236,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 260,0-266,0 | | | | | | | |
| -Nr. | 4 394 350 | | | | | | | |
| | 262,0-268,0 | 1070 | | | 100 | 130,0-170,0 | 200 4 | 0 0 0 0 |
| | 279,0-285,0 | | | | 100 | 120,0-1/0.0 | 3UU 1 | J.U-25. |

| | | | 4 • • • | | | |
|----|----------|----------|-----------|-----------|--------|----------|
| C. | Settings | tor Fuel | Injection | Pump with | Fitted | Governor |

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| | | | | | p with Fitte | | | Low id | le speed |
|--------------------|---|-------------------------------|----------|---------------------------|---|---------|-----------------|---------|-----------------------|
| Control | I delivery rod stop amp. 40°C (104°F) (2) | Breakaway intermediale ape | · (26) | Fuel delin high idle s | very characteristics (5e) speed (5b) | idle | fuel delivery 6 | | |
| rev/rpin | emp. 40°C (104°F) (2) cm³/1000 strokes | rev/min | ~ | rev/min | cm³/1000 strokes | rev/min | | rev/min | Control rod travel |
| 1 | 2 | 3 | _ | 4 | 5 | 6 | 7 | 8 | 9 |
| AC No | 4 394 351 | | | | | ſ | | | 11 |
| 1050 900 700 | 253,0-256,0 252,0-258,0 269,0-275,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 352 | | | | | | | | |
| 1050 900 700 | 262,0-268,0 267,0-273,0 267,0-273,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 394 353 | | | | | | | | |
| 1050 900 700 | 279,0-285,0 283,0-289,0 293,0-299,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| NC-Nr. 1050 | 4 394 354 296,0-302,0 | 1070 | | | | 100 | 420 0 470 0 | 200 | 10 0 05 4 |
| 900 760 | 301,0-307,0 309,0-315,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | 4 394 356 | | | | | | | | |
| 050 900 700 | 246,0 240,0 267,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 386 | | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| | 4 394 390 | 005 | | | | 400 | | | |
| 900 700 | 259,0-267,0 238,0-246,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-29,0 |
| | 4 394 428 | | | | | | | | |
| 000 800 | 188,0-196,0 180,0-187,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| | 4 394 473 | | | | | | | | |
| 850 750 | 189,0-197,0 185,0-193,0 | 875 | | | | 100 | 130,0-170,0 | 325 3 | 0,0 |
| | 4 394 501 | | | | | | | | |
| | 175,0 158,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 521 | | | | | | | | |
| | 239,0-247,0 229,0-235,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| | 4 394 527 | | | | | | | | |
| | 161,0 151,0 | 925 | | | | 100 | 130,0-170,0 3 | 300 1 | 9,0-25,0 |

| Full-load Control- | | Breakaway 20 | Fuel delin | rery characteristics (5a) | Starting Idio | fuel delivery 6 | Low id | le speed 5 |
|--|--|----------------------------------|----------------|------------------------------------|---------------|-------------------------------|--------------|----------------------|
| Test oil t | amp. 40°C (104°F) 2 | | | | switchin | g point | | Control roo |
| rev/min | cm ³ /1000 strokes | rev/min 49 | rev/min | cm ³ /1000 strokes 5 | rev/min 6 | cm ³ /1000 strokes | rev/min 8 | mm 9 |
| <u> </u> | 2 | - | - - | 3 | | | - | - |
| AC-Nr | . 4 394 541 | | | | | | | |
| 1050 | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | . 4 394 550 | | | | | | | |
| 1000 | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19-0-25 |
| 1C-Nr | 4 394 561 | | | | | | | , |
| 1050 | 258,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 900 | 256,0 | 1000 1000 | | | ,,,, | 150,0 170,0 | 300 | 13,0-23 |
| C-Nr. | . 4 394 564 | | | | | | | |
| 050 | 244,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 | 234,0 | | | | | | | |
| C-Nr. | 4 394 569 | | | | | | | |
| 000 | 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 590 | | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | ing of movemer | nt: 0,40 - 0,4 | l5 bar | at 750 PRM a | nd O, | 90 bar pressi | re, | gap shou |
| oe "02 | | • | | | | | | |
| - | 4 394 593 | 4060 4000 | | | 400 | | | |
| 050 | 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 4 394 703 | | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | 900 700 | 267,0-278,0 267,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| ilt s | top part posit | tion to obtain | quan | tity at 1050 | PRM. | Adjust stop p | art p | osition |
| obtair oar Di | n mean curve al ressure, gap sl | bove. Beginnii hould be "020' | ng of '. | movement: 0,4 | U - U | ,45 Dar at /: | OU PRI | M and U, |
| • | 4 394 705 | | | | | | | |
| | 4 394 706 | | | | | | | |
| 050 900 | 258,0 256,0 | 1060-1080 | • | | 100 | 130,0-170 | 300 | 19,0-25 |
| | 4 394 707 | | | | | | | |
| C-ML. | 4 394 /0/ | | | | | | | |
| 050 | | 1070 | | | 100 | 120 0 170 0 | 200 | 40 0 00 |
| 050 900 | 244,0 234,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 900 | 244,0 234,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 900 C-Nr. | 244,0 234,0 4 394 718 | | ٠ | | | | | |
| 900 | 244,0 234,0 | 1070 965 - 975 | | | 100 | 130,0-170,0 | | |
| 900 C-Nr. 955 800 | 244,0 234,0 4 394 718 198,0-213,0 | | • | | | | | |
| 900 C-Nr. 955 300 C-Nr. | 244,0 234,0 4 394 718 198,0-213,0 196,0-210,0 | | | | | 130,0-170,0 | 300 | 21,0-27, |
| 900 C-Nr. 955 300 C-Nr. | 244,0 234,0 4 394 718 198,0-213,0 196,0-210,0 4 394 719 | 965-975 | | | 100 | | 300 | 21,0-27, |
| 900 C-Nr. 955 800 C-Nr. 875 | 244,0 234,0 4 394 718 198,0-213,0 196,0-210,0 4 394 719 166,0-168,0 | 965-975 | | | 100 | 130,0-170,0 | 300 | 21,0-27, |
| 900 C-Nr. 955 800 C-Nr. 875 | 244,0 234,0 4 394 718 198,0-213,0 196,0-210,0 4 394 719 166,0-168,0 142,5-146,5 | 965-975 | | | 100 | 130,0-170,0 | 300 ; | 21,0-27, 21,0-27, |

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| C. Settings for Fuel Injection Pump with Fitted Governor | 2. \$ | Settings | for F | uel In | ection | Pump | with | Fitted | Governor |
|--|-------|----------|-------|--------|--------|------|------|---------------|----------|
|--|-------|----------|-------|--------|--------|------|------|---------------|----------|

| | I delivery | Breakaway 20 | Fuel deli | very characteristics (5a) | Starting l | fuel delivery 6 | Low idl | e speed 5 |
|------------------------|---|--------------------|-------------|-------------------------------|------------|-------------------------------|----------|-------------|
| Control- Test oil 1 | rod stop lemp. 40°C (104°F) 2 | intermediate speed | nign izae : | 9 (S) | switchin | g point | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min 49 | rev/min | cm ³ /1000 strokes | | cm ³ /1000 strokes | rely/min | um. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | - |
| AC-Nr. | . 4 394 740/741 | | | | | | | |
| 1020 915 | 213,0-226,0 208,0-218,0 | 1030-1040 | | | | | | |
| AC-Nr. | . 4 394 744 | | | | | | | |
| 1050 900 | 250,0 256,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | . 4 394 745 | | | | | | | |
| 950 750 | 208,0-214,0 196,0-202,0 | 990 | | | 100 | 130,0-170,0 | 300 | 21,0-27, |
| AC-Nr. | 4 394 746 | | | | | | | |
| 875 600 | 161,0-165,0 140,0-144,0 | 890 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 771 | | | • | | | | |
| 800 600 | 113,0-119,0 102,0-108,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 773 | | | | | | | |
| 800 600 | 125,0-131,0 134,0-140,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 775 | | | | | | | |
| 1025 900 | 192,0-198,0 180,0-186,0 | 1045 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 777 | | | | | | | |
| 1000 800 600 | 200,0-206,0 180,0-186,0 189,0-195,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 779 | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | | - | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 781 | | - | | | | | |
| 1025 900 700 | 230,0-236,0 207,0-213,0 209,0-215,0 | 1040 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 783 | | | | | | | |
| 1000 800 | 227,0-233,0 197,0-203,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 785 | | | | | | | |
| 1000 700 | 235,0-241,0 263,0-269,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |

| C. Settings for Fuel Injection Pump with Fitted Governor | C. | Settings | for Fuel In | jection | Pump with | Fitted | Governo |
|--|----|-----------------|-------------|---------|------------------|---------------|---------|
|--|----|-----------------|-------------|---------|------------------|---------------|---------|

| Test foil temp. 40°C (104°F) (2) resumedate speed rev/min cm²/1000 strokes rev/min cm²/1000 strokes rev/min cm²/1000 strokes rev/min cm²/1000 strokes rev/min cm²/1000 strokes rev/min cm²/1000 strokes rev/min cm²/1000 strokes rev/min rev | Full-load d | | Breakaway | (26) | | ery characteristics (5e) | | luel delivery (6) | Low idl | e speed 5 |
|--|-------------|-------------------------------|-------------------|-------------|-------------|--------------------------|------------------|-------------------|---------|------------|
| Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Cam Tricolog atrockes Teachman Teachma | | | intermediate spec | ٦ | high idle s | meed (ab) | idle switchin | g point | | |
| AC-Nr. 4 394 787 100 220,0-226,0 1020 100 130,0-170,0 300 19,0-25,0 600 227,0-233,0 100 130,0-170,0 300 25,0 600 227,0-233,0 100 130,0-170,0 300 25,0 600 19,0-25,0 600 19,0-25,0 600 19,0-25,0 600 19,0-25,0 600 19,0-25,0 600 139,0-145,0 600 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-170,0 300 19,0-25,0 600 147,0-133 | rev/min | cm ³ /1000 strokes | rev/min | Θ | rev/min | | | | 1 | M M |
| 1000 220,0-226,0 1020 1020 100 130,0-170,0 300 19,0-25,0 800 227,0-233,0 100 190,0 930 100 130,0-170,0 300 19,0-25,0 100 190,0 930 100 130,0-170,0 300 25,0 100 130,0-170,0 300 25,0 100 139,0-145,0 100 139,0-145,0 100 139,0-145,0 100 139,0-170,0 300 19,0-25,0 100 139,0-145,0 100 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 100 124,0-130,0 124,0-130,0 124,0-130,0 100 124,0-130,0 100 130,0-170,0 300 19,0-25,0 100 124,0-130,0 100 124,0-130,0 100 124,0-130,0 100 124,0-130,0 100 124,0-130,0 100 124,0-130,0 100 124,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 184,0-190,0 100 130,0-170,0 300 27,0-33,0 100 184,0-190,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 1 | <u> </u> | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | - |
| 1000 220,0-226,0 1020 1020 100 130,0-170,0 300 19,0-25,0 800 227,0-233,0 100 190,0 930 100 130,0-170,0 300 19,0-25,0 100 190,0 930 100 130,0-170,0 300 25,0 100 130,0-170,0 300 25,0 100 139,0-145,0 100 139,0-145,0 100 139,0-145,0 100 139,0-170,0 300 19,0-25,0 100 139,0-145,0 100 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 100 124,0-130,0 124,0-130,0 124,0-130,0 100 124,0-130,0 100 130,0-170,0 300 19,0-25,0 100 124,0-130,0 100 124,0-130,0 100 124,0-130,0 100 124,0-130,0 100 124,0-130,0 100 124,0-130,0 100 124,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-140,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 134,0-130,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 184,0-190,0 100 130,0-170,0 300 27,0-33,0 100 184,0-190,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 1 | AC-Nr. | 4 394 787 | • | | | | | | | |
| 800 203,0-215,0 600 227,0-233,0 8C-Nr. 4 394 789 910 190,0 930 100 130,0-170,0 300 25,0 8C-Nr. 4 394 791 900 160,0-166,0 920 100 130,0-170,0 300 19,0-25,0 8C-Nr. 4 394 793 600 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 8C-Nr. 4 394 795 700 127,0-133,0 600 124,0-130,0 8C-Nr. 4 394 797 880 139,0-145,0 880 139,0-145,0 880 139,0-145,0 880 134,0-130,0 8C-Nr. 4 394 799 925 157,0-163,0 880 145,0-151,0 600 134,0-140,0 8C-Nr. 4 394 801 1000 180,0-186,0 800 154,0-160,0 700 142,0-189,0 800 137,0-163,0 800 154,0-165,0 800 154,0-165,0 800 154,0-165,0 800 154,0-165,0 800 147,0-153,0 900 161,0-175,0 800 147,0-153,0 900 162,0-168,0 900 187,0-193,0 900 187,0-193,0 900 187,0-193,0 900 187,0-193,0 900 187,0-193,0 900 187,0-193,0 900 187,0-193,0 900 187,0-193,0 900 187,0-193,0 900 184,0-190,0 900 184,0-190,0 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 900 184,0-190,0 900 203,0-209,0 920 100 130,0-170,0 300 27,0-33,0 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | 1020 | | | | 100 | 130.0-170.0 | 300 | 19.0-25.0 |
| AC-Nr. 4 394 789 910 190,0 930 100 130,0-170,0 300 25,0 AC-Nr. 4 394 791 900 160,0-166,0 700 139,0-145,0 AC-Nr. 4 394 793 600 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 AC-Nr. 4 394 795 700 127,0-133,0 600 124,0-130,0 AC-Nr. 4 394 797 800 139,0-145,0 600 124,0-130,0 AC-Nr. 4 394 799 925 157,0-163,0 820 145,0-151,0 600 145,0-151,0 600 134,0-140,0 AC-Nr. 4 394 801 1000 180,0-186,0,0 1000 100,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 130,0-170,0 1000 150,0-153,0 1000 187,0-193,0 1000 187,0-193,0 1000 184,0-190,0 1000 130,0-170,0 1000 | 800 | 209,0-215,0 | 1020 | | | | | | | |
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| AC-Nr. 4 394 791 900 160,0-166,0 920 AC-Nr. 4 394 793 600 124,0-130,0 620 AC-Nr. 4 394 795 700 127,0-133,0 720 AC-Nr. 4 394 797 800 139,0-145,0 820 AC-Nr. 4 394 797 800 139,0-145,0 820 AC-Nr. 4 394 799 925 157,0-163,0 945 800 144,0-130,0 AC-Nr. 4 394 801 1000 180,0-186,0 1020 800 154,0-160,0 700 142,0-133,0 1070 900 161,0-175,0 800 AC-Nr. 4 394 803 AC-Nr. 4 394 805 900 187,0-193,0 920 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 27,0-33,0 100 100,0-170,0 300 27,0-33,0 100 100,0-170,0 300 27,0-33,0 100 100,0-170,0 300 27,0-33,0 100 100,0-170,0 300 27,0-33,0 100 100,0-170,0 300 27,0-33,0 100 100,0-170,0 300 100,0-170,0 300 27,0-33,0 100 100,0-170,0 300 27,0-33,0 100 100,0-170,0 300 | AC-Nr. | 4 394 789 | | | | | | | | |
| 900 160,0-166,0 920 100 130,0-170,0 300 19,0-25,0 139,0-145,0 100 139,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 127,0-133,0 720 100 130,0-170,0 300 19,0-25,0 124,0-130,0 124,0-130,0 100 130,0-170,0 300 19,0-25,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 125,0 125,0 125,0-151,0 600 134,0-140,0 130,0-170,0 300 19,0-25,0 124,0-140,0 124,0-140,0 125,0 125,0-151,0 125,0 125,0-151,0 125,0 125,0 125,0-151,0 125,0 125,0 125,0-151,0 125,0 125,0 125,0-151,0 125, | 910 | 190,0 | 930 | | | | 100 | 130,0-170,0 | 300 | 25,0 |
| 900 160,0-166,0 920 100 130,0-170,0 300 19,0-25,0 139,0-145,0 100 139,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 127,0-133,0 720 100 130,0-170,0 300 19,0-25,0 124,0-130,0 124,0-130,0 100 130,0-170,0 300 19,0-25,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 124,0-130,0 125,0 125,0 125,0-151,0 600 134,0-140,0 130,0-170,0 300 19,0-25,0 124,0-140,0 124,0-140,0 125,0 125,0-151,0 125,0 125,0-151,0 125,0 125,0 125,0-151,0 125,0 125,0 125,0-151,0 125,0 125,0 125,0-151,0 125, | ΔC-Nr | 4 394 791 | | | | | | | | |
| 700 139,0-145,0 AC-Nr. 4 394 793 600 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 AC-Nr. 4 394 795 700 127,0-133,0 720 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 945 100 130,0-170,0 300 19,0-25,0 600 134,0-140,0 134,0-140,0 600 134,0-140,0 1020 100 130,0-170,0 300 19,0-25,0 600 154,0-160,0 1020 100 130,0-170,0 300 19,0-25,0 600 161,0-175,0 800 161,0-175,0 800 161,0-175,0 800 147,0-153,0 600 147,0-153,0 600 162,0-168,0 600 162,0-170,0 300 27,0-33,0 600 162,0-170,0 300 27,0-33,0 600 162,0-170,0 300 19,0-25,0 600 162,0-170,0 300 19,0-25,0 600 162,0-170,0 300 19,0-25,0 600 162,0-170,0 300 19,0-25,0 600 100 130,0-170,0 300 19,0-25,0 | | | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 600 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 AC-Nr. 4 394 795 700 127,0-133,0 720 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 720 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 945 100 130,0-170,0 300 19,0-25,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 154,0-160,0 700 142,0-148,0 600 154,0-160,0 700 142,0-148,0 600 147,0-153,0 | | | 750 | | | | | | | |
| 600 124,0-130,0 620 100 130,0-170,0 300 19,0-25,0 AC-Nr. 4 394 795 700 127,0-133,0 720 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 720 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 945 100 130,0-170,0 300 19,0-25,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 154,0-160,0 700 142,0-148,0 600 154,0-160,0 700 142,0-148,0 600 147,0-153,0 | AC-Nr. | 4 394 793 | | | | | | | | |
| AC-Nr. 4 394 795 700 127,0-133,0 720 100 130,0-170,0 300 19,0-25,0 AC-Nr. 4 394 797 800 139,0-145,0 820 100 130,0-170,0 300 19,0-25,0 AC-Nr. 4 394 799 925 157,0-163,0 945 800 145,0-151,0 600 134,0-140,0 AC-Nr. 4 394 801 1000 180,0-186,0 1020 800 154,0-160,0 700 142,0-148,0 AC-Nr. 4 394 803 1050 207,0-213,0 1070 900 161,0-175,0 800 147,0-153,0 AC-Nr. 4 394 805 900 187,0-193,0 920 100 130,0-170,0 300 19,0-25,0 AC-Nr. 4 394 807 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 AC-Nr. 4 394 807 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | 620 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
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| AC-Nr. 4 394 797 800 139,0-145,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 945 100 130,0-170,0 300 19,0-25,0 800 145,0-151,0 600 134,0-140,0 600 134,0-140,0 600 134,0-140,0 600 154,0-160,0 700 142,0-148,0 700 142,0-148,0 700 142,0-136,0 1070 100 130,0-170,0 300 19,0-25,0 900 161,0-175,0 800 147,0-153,0 700 162,0-168,0 700 162,0-168,0 700 162,0-168,0 700 162,0-168,0 700 162,0-168,0 700 162,0-168,0 700 162,0-168,0 700 162,0-168,0 700 184,0-190,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 920 100 130,0-170,0 300 19,0-25,0 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 900 2 | | | /20 | | | | 100 | 130,0-170,0 | 300 | 13,0-23,0 |
| 800 139,0-145,0 820 100 130,0-170,0 300 19,0-25,0 600 124,0-130,0 945 100 130,0-170,0 300 19,0-25,0 800 145,0-151,0 600 134,0-140,0 800 154,0-160,0 700 142,0-148,0 800 154,0-160,0 700 142,0-148,0 800 161,0-175,0 800 147,0-153,0 800 147,0-153,0 800 147,0-153,0 800 147,0-168,0 920 100 130,0-170,0 300 19,0-25,0 800 147,0-193,0 920 100 130,0-170,0 300 27,0-33,0 800 147,0-193,0 920 100 130,0-170,0 300 27,0-33,0 800 147,0-193,0 920 100 130,0-170,0 300 27,0-33,0 800 147,0-193,0 920 100 130,0-170,0 300 27,0-33,0 80.0 147,0-193,0 920 100 130,0-170,0 300 27,0-33,0 80.0 147,0-190,0 920 100 130,0-170,0 300 27,0-33,0 80.0 147,0-190,0 920 100 130,0-170,0 300 19,0-25,0 80.0 147,0-190,0 920 100 130,0-170,0 300 27,0-33,0 80.0 147,0-190,0 920 100 130,0-170,0 300 19,0-25,0 920 92 | | | | | | | | | | |
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| AC-Nr. 4 394 799 925 157,0-163,0 945 800 145,0-151,0 600 134,0-140,0 800 145,0-151,0 800 154,0-160,0 800 154,0-160,0 800 154,0-160,0 800 154,0-160,0 700 142,0-148,0 800 154,0-160,0 800 161,0-175,0 800 161,0-175,0 800 147,0-153,0 800 147,0-153,0 800 147,0-153,0 800 147,0-168,0 920 100 130,0-170,0 300 27,0-33,0 800 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 80,0-170,0 | | | 820 | | | | 100 | 130,0-170,0 | 300 | 13,0-25,0 |
| 925 157,0-163,0 945 800 145,0-151,0 600 134,0-140,0 AC-Nr. 4 394 801 1000 180,0-186,0 1020 800 154,0-160,0 700 142,0-148,0 AC-Nr. 4 394 803 1050 207,0-213,0 1070 900 161,0-175,0 800 147,0-153,0 AC-Nr. 4 394 805 900 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 AC-Nr. 4 394 807 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 27,0-33,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | | | | | | | | |
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| 1000 180,0-186,0 1020 100 130,0-170,0 300 19,0-25,0 800 154,0-160,0 700 142,0-148,0 100 130,0-170,0 300 19,0-25,0 1050 207,0-213,0 1070 100 130,0-170,0 300 19,0-25,0 100 161,0-175,0 800 147,0-153,0 100 130,0-170,0 300 27,0-33,0 100 162,0-168,0 100 130,0-170,0 300 27,0-33,0 100 162,0-168,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 19,0-25,0 100 100 130,0-170,0 300 19,0-25,0 100 130,0-170,0 300 19,0-25,0 100 100 100,0-170,0 300 19,0-25,0 100 100 100,0-170,0 300 19,0-25,0 100 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0- | 600 | 134,0-140,0 | | | | | | | | |
| 800 154,0-160,0 700 142,0-148,0 AC-Nr. 4 394 803 1050 207,0-213,0 1070 100 130,0-170,0 300 19,0-25,0 900 161,0-175,0 800 147,0-153,0 AC-Nr. 4 394 805 900 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 AC-Nr. 4 394 807 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | AC-Nr. | 4 394 801 | | | | | | | | |
| 700 142,0-148,0 AC-Nr. 4 394 803 1050 207,0-213,0 1070 100 130,0-170,0 300 19,0-25,0 900 161,0-175,0 800 147,0-153,0 AC-Nr. 4 394 805 900 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 700 162,0-168,0 AC-Nr. 4 394 807 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 920 | | | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 394 803 1050 207,0-213,0 1070 100 130,0-170,0 300 19,0-25,0 900 161,0-175,0 800 147,0-153,0 100 130,0-170,0 300 27,0-33,0 100 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 700 162,0-168,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 19,0-25,0 100 100 100,0-170,0 300 19,0-25,0 100 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0-170,0 100 100,0- | | | | | | | | • | | |
| 1050 207,0-213,0 1070 100 130,0-170,0 300 19,0-25,0 900 161,0-175,0 800 147,0-153,0 100 130,0-170,0 300 19,0-25,0 100 147,0-153,0 100 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 700 162,0-168,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 27,0-33,0 100 130,0-170,0 300 19,0-25,0 100 100 130,0-170,0 300 19,0-25,0 100 100 130,0-170,0 300 19,0-25,0 100 100 100 100 100 100 100 100 100 1 | | • | | | | | | | | |
| 900 161,0-175,0 800 147,0-153,0 AC-Nr. 4 394 805 900 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 700 162,0-168,0 AC-Nr. 4 394 807 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | | | | | 440 | 400 0 470 0 | | 40 0 05 0 |
| 800 147,0-153,0 AC-Nr. 4 394 805 900 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 700 162,0-168,0 AC-Nr. 4 394 807 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 900 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 700 162,0-168,0 920 100 130,0-170,0 300 27,0-33,0 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 920 100 130,0-170,0 300 19,0-25,0 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | | | | | | | | |
| 900 187,0-193,0 920 100 130,0-170,0 300 27,0-33,0 700 162,0-168,0 920 100 130,0-170,0 300 27,0-33,0 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 920 100 130,0-170,0 300 19,0-25,0 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | AC-Nr | 4 394 805 | | | | | | | | |
| 700 162,0-168,0 AC-Nr. 4 394 807 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | 920 | | | | 100 | 130.0-170.0 | 300 | 27.0-33.0 |
| 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | <i>3</i> | | | | | ,,. | | _,,c ••; |
| 900 200,0-206,0 920 100 130,0-170,0 300 27,0-33,0 700 184,0-190,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | ΔC-N∽ | 4 394 807 | | | | | | | | |
| 700 184,0-190,0 AC-Nr. 4 394 809 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | 920 | | | | 100 | 130.0-170.0 | 300 | 27,0-33-0 |
| 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | | | <i>3</i> 20 | | | | | ,5 .,4,4 | | |
| 900 203,0-209,0 920 100 130,0-170,0 300 19,0-25,0 | AC-Nr. | 4 394 809 | | | | | | | | |
| | | | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | J = - | | | | | - | | |

| C. Settings | for Fuel tr | njection Pump wit | h Fitted Govern | or |
|-------------|-------------|-------------------|-----------------|----|

-16-

| | ttings for FL | 10. 11.,000 | | , | | | | li a | |
|---------------------------|----------------------------|-------------------|-------------|-----------|---------------------------------------|------------|-------------------------------|---------|-------------|
| Full-load (Control-re | | Breakaway | (29) | Fuel deli | very characteristics (5 speed (50) | Starting i | fuel delivery 6 | LOW 10 | e speed 3 |
| Test oil te | mp. 40°C (104°F) 2 | intermediate aper | \sim | | (S) | switchin | g point | | Control ro- |
| rev/min | cm³/1000 strokes | rev/min | (4) | rev/min | cm ³ /1000 strokes | 1 1 | cm ² /1000 strokes | rev/min | mm |
| 1 | 2 | 3 | | 1 | 5 | 6 | 7 | 8 | 9 |
| 1C-Nr | 4 394 811 | | | | | | | | |
| 750 | 185,0-191,0 | 770 | | | | 100 | 130,0-170,0 | 200 | 10 0-25 |
| 600 | 222,0-228,0 | 770 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 813 | | | | | | | | |
| 800 600 | 210,0-218,0 223,0-229,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 815 | | | | | | | | |
| 050 | 222,0-228,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19 0-25 |
| 900 | 202,0-208,0 | | | | | ••• | .00,0 .,0,0 | - 000 | 13,0 23 |
| 700 | 207,0-213,0 | | | | | | | | |
| C-Nr. | 4 394 817 | | | | | | | | |
| 000 | 240,0-246,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 600 | 224,0-230,0 237,0-243,0 | | | | • | | | | |
| | 4 394 819 | | | | | | | | |
| 050 | 245,0-251,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 900 | 224,0-230,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 237,0-243,0 | | | | | | | | |
| C-Nr. | 4 394 821 | | | | | | | | |
| 000 800 | 217,0-223,0 197,0-203,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 219,0-225,0 | | | | | | | | |
| C-Nr. | 4 394 823 | | | | | | | | |
| 900 | 210,0-216,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27.0-33 |
| 700 | 212,0-218,0 | | | | | | | | _,,, |
| C-Nr. | 4 394 825 | | | | | | | | |
| | 269,0-275,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 281,0-287,0 293,0-299,0 | | | | | | | | |
| | 4 394 827 | | | | | | | | |
| | | 4070 | | | | 400 | 400 0 470 0 | | |
| | 234,0-240,0 246,0-252,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 268,0-274,0 | | | | | | • | | |
| C-Nr. | 4 394 829 | | | | | | | | |
| | 262,0-268,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 279,0-285,0 289,0-295,0 | | | | | | | , | J = |
| , 00 | 207,0-270,0 | | | | | | | | |
| C-Nr. | 4 394 831 | | | | | | | | |
| | | | | | | | | | |
| | 241,0-247,0 265,0-271,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |

| Full-load Control-r Test oil te | | | Fuel delin high idle i | very characteristics (56) | Starting Idla switchin | iner nexistary | Low idle | Control roo |
|---------------------------------------|----------------------------|-----------|---------------------------|-------------------------------|------------------------------|------------------|----------|----------------|
| rev/min | cm²/1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travei - mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| C-Nr. | 4 394 833 | | | | - | | | |
| 900 700 | 232,0-238,0 253,0-259,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 204 025 | | | | | | | |

-17-

| Test ou | 10d slop lemp. 40°C (104°F) (2) | intennediate speed | high idle i | (S) | awitchir | ng point | | Control rod |
|-------------|------------------------------------|--------------------|-------------|-------------------------------|----------|------------------|---------|-------------|
| rev/min | cm³/1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rév/mir | 1 1 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | - |
| AC-Nr | 4 394 833 | | | | | | | |
| 900 | 232,0-238,0 | 920 | | | 100 | 120 0~170 0 | 200 | 10 0 25 (|
| 700 | 253,0-259,0 | 320 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 835 | | | | | | | |
| 750 | 244,0-250,0 | 770 | | | 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| 700 | 253,0-259,0 | | | | | • | | ,. |
| AC-Nr. | 4 394 837 | | | | | | | |
| 800 | 239,0-245,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 600 | 248,0-254,0 | | | | | | | |
| AC-Nr. | 4 394 839 | | | | | | | |
| 1000 800 | 212,0-218,0 230,0-236,0 | 1020 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | | | | | | |
| | 4 394 841 | | | | | | | |
| 900 700 | 288,0-294,0 287,0-293,0 | 920 | | | 100 | 130,0-170,0 | 300 2 | 27,0-33,0 |
| VC-N2 | 4 394 843 | | | | | | | |
| 1000 | 255,0-261,0 | 1020 | | | 100 | 130,0-170,0 | 200 4 | 10 0 25 0 |
| 800 | 272,0-278,0 | 1020 | | | 100 | 150,0-170,0 | 300 | 9,0-25,0 |
| 600 | 270,0-276,0 | | | | | | | |
| AC-Nr. | 4 394 845 | | | | | | | |
| 1050 900 | 239,0-245,0 233,0-239,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 700 | 273,0-279,0 | | | ī | | | | |
| AC-Nr. | 4 39% 847 | | | | | | | |
| 1000 | 215,0-221,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 800 600 | 197,0-203,0 220,0-226,0 | | | | | | | |
| | | | | | | | | |
| 900 | 4 394 849 222,0-228,0 | 920 . | • | | 100 | 420 0 470 0 : | 200 4 | 0 0 05 0 |
| 700 | 254,0-260,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 851 | | | | | | | |
| | 257,0-263,0 | 1070 | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| 750 | 272,0-278,0 | | | | | • | | |
| Nc-Nr. | 4 394 853 | | | | | | | |
| | 295,0-303,0 | 1075 | | | 100 | 130,0-170,0 3 | 300 2 | 5,0 |
| 900 | 309,0-315,0 | | | | | | | , |
| | 4 394 857 | | | | | | | |
| | 262,0-268,0 267,0-273,0 | 1070 | | | 100 | 130,0-170,0 3 | 300 1 | 9,0-25,0 |
| | 267,0-273,0 | | | 100 41 | | 3 | | |

G13

-18-

| Full-load Control- | delivery rod stop | Breakaway (| 20) Fuel deli | very characteristics (5e | Starting | fuel delivery 6 | Low idl | e speed 5 |
|-----------------------|---|--------------------|-------------------|---|-------------|----------------------|---------------|-------------|
| Test out | amp. 470 (104%) 2 | intermediate speed | \sim l | (a) | awitchi | ng point I | Ì | Control rod |
| Isahun | cm³/6000 strokes | | sev/min | cm ³ /1000 strokes | ŀ | cm³/1000 strokes | rely/min | mm . |
| 1 | +2 | 3 | - 4 | 5 | 6 | 7 | 8 | • |
| | | | | | | | | · |
| AC-Nr. | 4 394 861 | | | | | | | |
| 1050 900 700 | 296,0-302,0 301,0-307,0 309,0-315,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 863 | | | | | | | |
| 1050 900 700 | 253,0-256,0 252,0-258,0 269,0-275,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 865 | | | | | | | |
| 1050 900 700 | 208,0-214,0 230,0-236,0 260,0-266,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 867 | | | | | | | |
| 900 700 | 181,0-187,0 172,0-178,0 | 920 | | | 105 | 130'20-170.0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 869 | | | | | | | |
| 925 800 700 | 176,0-182,0 162,0-168,0 177,0-183,0 | 945 | | | 100 | ₁30,⊋∈170 , 0 | 30 0 1 | 9,0-25,0 |
| AC-Nr. | 4 394 871 | | | | | | | |
| 900 800 | 173,0-179,0 160,0-166,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 873 | | | | | | | |
| 925 800 700 | 237,0-243,0 251,0-257,0 269,0-275,0 | 945 | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| AC-Nr. | 4 394 875 | | | | | | • | |
| 700 600 | 218,0-224,0 240,0-246,0 | 720 | | | ₹ 00 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| AC-Nr. | 4 394 877 | • | | | | | | |
| 1050 900 700 | 213,0-219,0 212,0-218,0 240,0-246,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| AC-Nr. | 4 394 879 | | | | • | | | |
| 1050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | 100 | 130,0-170,0 | 19,0-2 | 25,0 |

Tilt stop part position to obtain quantity at 1050 PRM. Adjust step part position to obtain mean curve above.

G14

| C. | Settings | for Fuel in | jection Pum | with Fitted | Governor |
|----|----------|-------------|-------------|-------------|----------|

-19-

| Full-load Control-re | | Breakaway 🖎 | Fuel delin | very characteristics (56 | Starting | fuel delivery 6 | Low 1d | le speed 5 |
|-------------------------|--------------------------------|-------------------------------|-----------------|-------------------------------|----------|-------------------------------|---------|---------------|
| Test oil te | mp. 40°C (104°F) 2 | intermediate speed | | (3b) | | ng point | | Control rod |
| (ev/min | cm³/1000 strokes | rev/min 49 | rev/min | cm ³ /1000 strokes | j . | cm ³ /1000 strokes | rëv/mir | mm |
| 1 | 2 | 3 | - | 5 | 6 | / | 8 | • |
| lC-Nr. | 4 394 881 | | | | | | | |
| 700 600 | 246,0 263,0 | 720 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 883 | | | | | | | |
| 050 | 244,5-254,5 | 1060-1080 | | į | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 885 | | | | | | | |
| 600 | 258,0 | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| C-Nr. | 4 394 891 | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| C-Nr. | 4 394 893 | | | | | | | |
| 900 700 | 259,0-267,0 238,0-246,0 | 925 | | | 100 | 130,0-170,0 | 300 | 19,0-29,0 |
| C-Nr. | 4 394 895 | | | | | | | |
| 000 800 | 188,0-196,0 180,0-187,0 | 1025 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| C-Nr. | 4 394 897 | | | | | | | |
| 850 750 | 189,0-197,0 185,0-193,0 | 875 | | | 100 | 130,0-170,0 | 325 | 30,0 |
| C-Nr. | 4 394 899 | | | | | | - | |
| 900 700 | 175,0 158,0 | 925 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 905 | | | | | | | |
| | 239,0-247,0 229,0-235,0 | 1025 | | | 100 | 130,0-170,0 | 300 | 25,0 |
| C-Nr. | 4 394 907 | | | | | | | |
| | 161,0 151,0 | 925 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| eqinn' | ing of movementar pressure, ga | t: 0,40 - 0,4 ap should be | 5 bar "020". | at 750 PRM ai | nd | | | |
| C-Nr. | 4 394 909 | | | | | | | |
| 050 | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 911 | | | | | | | |
| 000 | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | 4 394 915 | | | | | | | |
| 000 | 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |

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AC-Nr. 4 394 917

1060-1080 260.5-271.0 1050

100 130,0-170,0 300 19,0-25,0

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and

0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 919

215,5-261,5 1050

1060-1080

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 921

1050 260,5-271,0

900 1060-1080

267,0-278,0

100 130,0-170,0 300 19,0-25,0

700 267,0-278,0

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above. Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 925

1050 244.0

1070

100 130,0-170,0 300 19,0-25,0

900 234,0

AC-Nr. 4 394 997

900 173,0-179,0 800 160,0-166,0 920

130,0-170,0 300 19,0-25,0

Test Specifications Fuel Injection Pumps ① and Governors

40

WPP 001/4 ALO 16,0 a 2

PE 6 P 120 A 420 LS 152 ROV 300...95

RQV 300...950 PA 112 KR

supersedes

companyAllis-Chalmers engine: 16000-25000

Values only apply to test nozzle-and-holder assembly 0 681 443 022 and fuel-injection test tubing 9 681 230 703.

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

0 401 846 223

1 - 5 - 3 - 6 - 2 - 4

2,8-2,9(2,75-2,95m)m (from BDC)

| Rotational speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|--------------------------|----------------------------------|--|---|----------------------------------|--|---|
| 1000 | 12 | 26,4 - 27,1 | | | 1,0 | |
| 200 | 6 | 4,2 - 5,2 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rated: | rev/min | Control rod | (4) | Intermediate | rated sp | Control rod | Lower rated Degree of | speed | Control rod | Slidings | leeve travel |
|-----------------------------------|--------------------------------------|---|------------|-----------------------------------|--------------|-------------|-----------------------------------|--------------------------|------------------------------------|--|---|
| deflection of control lever | Control rod travel mm 2 | travel mm rev/min 3 | <u>a</u> | deflection of control lever | rev/min 5 | mm 4 | deflection of control lever | rev/min 8 | mm 3 | rev/min 10 | mm 11 |
| 66° | 1050 1100 1150 1210 1300 | 15,0-18, 10,7-15, 6,0-11, 0- 7, 0 | ,0 ,6 | | | | 10° | 250 350 450 550 | 6,4-8,0 3,0-5,2 1,3-2,8 0 | 180- 260 400 550 1000 1200- 1290 | Start 1,8-2,7 3,8-4,2 7,5-7,9 End |

Torque control travel a =

mm

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load of Control-ro Test oil ter | | Rotational-speed 2b limitation intermediate speed | Fuel delin high idle s | | Starting Idle switchi | \mathbf{O} | Torque- travel | control 5 |
|--|-------------------------------|---|---------------------------|-------------------------------|-----------------------------|-------------------------------|-------------------|--------------|
| rev/min | cm ³ /1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

G17

BOSCH

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| | - | | • | |
|----|----------------|-----------------|---|------------------------|
| | Sattings | for Eugl Inject | ion Dumn with | Fitted Governor |
| v. | COLLINS | IOI LACI NACCI | ron camp am | LITTER CALCIUM |
| _ | | | _ | |

-2-

| Control | d delivery Frod stop | Breakaway | | Full-load Control-r | | ② | Idle | fuel delivery 6 |) Low | idle speed 5 |
|---------|--|-------------------------------|----------|------------------------|-----------------------------|-----|------|-------------------------------|-------|---------------------------------|
| rev/min | temp. 40°C (104°F) (2) cm³/1000 strokes | intermediate ape rev/finin | | ev/min | cm ³ /1000 stroi | | | cm ³ /1000 strokes | rev/m | Control rod travel vin mm |
| 1 | | 3 | | · | 2 | | 6 | 7 | 8 | 9 |
| • | • | • | • | | • | | • | • | • | • |
| AC-Nr. | 4 320 754 | | | | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 7 | 00 | 99,0-103 | 3,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 793 | | | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 70 | 00 | 126,0-130 | 0,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 815 | | | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 70 | 00 | 101,0-107 | 7 0 | 100 | 90 0-130 (| 300 | 19,0-25,0 |
| 300 | 100,0 100,0 | J.0 J20 | | 00 | 111,0-117 | | 100 | 30,0-130,0 | , 500 | 13,0-25,0 |
| AC-Nr. | 4 320 816 | | | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 80 | າດ | 98,0-104 | · ^ | 100 | 00 0_120 (| 200 | 19,0-25,0 |
| | • | 310-320 | O. | ,0 | 30,0-104 | ,,0 | 100 | 30,0-130,0 | 300 | 19,0-25,0 |
| | 4 320 817 | | | | | | | | | |
| 1100 | 139,0-143,0 | 1120 | 80 60 | | 149,0-154 153,0-161 | | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| • • • • | | | | ,,, | 155,0-101 | , 0 | | | | |
| | 4 320 829 | | | | | | | | | • |
| 1100 | 139,0-143,0 | 1120 | 80 60 | | 149,0-154 153,0-161 | | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| • • • • | | | | | 100,0101 | ,0 | | | | |
| | 4 320 933 | | | | | | | | | |
| 900 | 102,0-110,0 | 1040 | 80 | 10 | 107,0-116 | ,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 320 939 | | | | | | | | | |
| 900 | 98,5 <u>+</u> 3 | 1040 | 70 | 0 | 107,5 + 4 | | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr | 4 320 940 | | | | | | | | | • |
| 900 | 78,0- 86,0 | 1040 | 70 | n | 100,0-109 | Ω | 100 | 90,0-130,0 | 200 | 25.0 |
| | | 1040 | ,, | • | 100,0-103 | •0 | 100 | 30,0-130,0 | 200 | 25,0 |
| | 4 320 941 | | | _ | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 70 | 0 | 99,0-103 | ,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 942 | | | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 70 | 0 | 126,0-130 | ,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 980 | | | | | | | | | |
| 900 | 108,0-116,0 | 1120 | 80 | n | _ | | 100 | 90,0-130,0 | 275 | 0.0.10.0 |
| | - | 1120 | | • | _ | | 100 | 30,0-130,0 | 3/5 | 3,0-19,0 |
| | 4 320 981 | | | | | | | | | |
| 900 | 111,0-119,0 | 1020 | 80 | 0 | 112,0-118 | •0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 321 016 | | | | | | | | | |
| 750 | 95,0-101,0 | 1020 | 75 | 0 | 95,0-101 | ,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 321 064 | | | | | | | | | - |
| 1000 | 112,0 | 1030 | 80 | n | 112,5 | | 100 | 90,0-130,0 | 300 | 25 0 |
| . 556 | | 1000 | 50 | • | | | 100 | 30,0-130,0 | 200 | 25,0 |

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| C. | Settings | for | Fuel In | jection | Pump | with | Fitted | Governor |
|----|-----------------|-----|---------|---------|------|------|---------------|----------|

| Full-load of Control-re | | Breakaway | Full-load Control-n Test oil te | | Starting in the switching | ner convery (6) | Low idl | e speed 3 Control ro |
|----------------------------|------------------|-----------|---------------------------------------|-------------------------------|---------------------------|-----------------|----------|-------------------------|
| ten/tunu | cm³/1000 strokes | | rev/min | cm ³ /1000 strokes | rev/min | | reiv/mun | travel mm |
| 1 | 5 | 3 | - - | 5 | 6 | 7 | 8 | - |
| | • | • | • | • | | • | • | • |
| C-Nr. | 4 359 816 | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| | • | | 000 | 11130-11730 | | | | |
| C-Nr. | 4 359 826 | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 828 | | | | | | | |
| 100 | 139,0-143,0 | 1120 | 800 | 149,0-154,0 | 100 | 90,0-130,0 | 375 | 9,0-19 |
| | | | 600 | 153,0-161,0 | | | | |
| IC-Nr. | 4 359 830 | | | | | | | |
| 025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 832 | | | · | | | | |
| 000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19.0-25 |
| | - | | , , , | | | | | • |
| | 4 392 693 | 4065.00 | 000 | 467 0 477 0 | 400 | 120 0 170 0 | 200 | 40 0 25 |
| 050 | 205,0-215,0 | 1065-80 | 900 | 167,0-177,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| C-Nr. | 4 392 695 | | | | | | | |
| 900 | 149,0-155,0 | 920 | - | - | - | - | 300 | 19,0-25 |
| C-Nr. | 4 392 697 | | | | | | | |
| 750 | 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C \$1 | 4 392 699 | | | | | | | |
| 800 | | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 | 10 0-25 |
| | 210,0-218,0 | 020 | 800 | 223,0-223,0 | 100 | 130,0-170,0 | 500 | 13,0~2. |
| | 4 392 701 | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 703 | | | | | | | |
| 050 | 220,0-230,0 | 1060-70 | 900 | 200,0-210,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 205,0-215,0 | | | | |
| C-Nr. | 4 392 707 | | | | | | | |
| 050 | 243,0-253,0 | 1060-80 | 900 | 222,0-232,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 235,0-245,0 | | | | |
| C-Nr. | 4 392 709 | | | | | | | |
| 000 | 217,0-223,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 600 | 219,0-225,0 | | | | |
| C-Nr. | 4 392 711 | | | | | | | |
| 600 | 231,0-237,0 | 620 | _ | _ | - | - | 300 | 19,0-25 |

| Full-load Control | od stop | Breakaway | Control | d delivery (2) | Idle | fuel delivery 6 | Low id | le speed 5 |
|----------------------|---|----------------|-------------|--|------|------------------------------|--------|-------------|
| rest on w | mp. 40°C (104°F) (2 cm³/1000 strokes | restructate ap | (4) rev/min | temp. 40°C (104°F) cm³/1000 strokes | | ng point cm³/1000 strokes | | Control roc |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | ev/min | 9 |
| | | | 1 | | Ţ | | 1 | i |
| C-Nr. | 4 392 715 | | | | | | | |
| 050 | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C. No. | A 202 717 | | 700 | 1/5,0-101,0 | , | | | |
| 050 | 4 392 717 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | 4 392 719 | | | | | | | , |
| 050 | 200,0-206,0 | 1070 | 900 | 190,0-196,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 214,0-220,0 |) | • | | |
| | 4 392 721 | | | | | | | |
| 050 | 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 723 | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 725 | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 727 | | | | | | | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 4 392 729 | | | | | | | |
| 000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300. | 19,0-25 |
| | 4 392 731 | 920 | 700 | 207 0_202 0 | 100 | 120 0 170 0 | 200 | 27 0 22 |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | Z/,U-33 |
| C-Nr. 050 | 4 392 735 239,0-245,0 | 1070 | 900 | 233,0-239,0 | 100 | 130,0-170,0 | 300 | 19.6-25 |
| 930 | 203,0 240,0 | 1070 | 700 | 273,0-279,0 | | 100,0 170,0 | 300 | 13,0 23 |
| C-Nr. | 4 392 737 | | | | | | | |
| 000 | 215,0-221,0 | 1020 | 800 600 | 197,0-203,0 220,0-226,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr | 4 392 739 | | - 3 + | | | | | |
| | 207,0-213,0 | 1050 | 900 | 195,0-201,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 225,0-231,0 | | | | • |
| | 4 392 741 | 4675 | | 000 0 000 | | 400 0 400 | | |
| 050 | 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | | 130,0-170,0 | - | - |
| C-Nr. | 4 392 743 | | | | | | | |
| | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | | 130,0-170,0 | 300 | 19,0-25. |

Testoil-ISO 4113

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| i. Settings i | or ruel injection rump (| with ritted Governor |
|---------------|--------------------------|----------------------|
| | | |

| Full-toad | delivery | Breakaway | (20) Full-load | delivery | Startino | fuel delivery (6) | Low id | le speed 3 |
|-----------|------------------|--------------------|-----------------|-------------------------------|------------------|-------------------|-------------|------------|
| Control-r | | intermediate spec | Control | | idle switchir | | | Control re |
| revimin | cm³/1000 strokes | rev/min | (4) rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | reiv/mar | travel |
| 1 | 3 | 3 | - - | 2 | 6 | 7 | 8 | 9 |
| | • | | · | • | • | | | |
| C-Nr. | 4 392 747 | | | | | | | |
| 050 | 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 749 | | | | | | | |
| 050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 750 | | | | | | | |
| 050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | • | | | | | | | |
| - | 4 392 768 | 820 | 600 | 132,0-142,0 | 100 | 130,0-170,0 | 300 | 19 0-25 |
| 800 | 123,0-133,0 | 820 | 000 | 132,0-142,0 | 100 | 150,0-170,0 | 300 | 13,0-2. |
| _ | 4 392 775/776 | | | | | | | |
| 875 | 162,0-164,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| C-Nr. | 4 392 777 | | | | | | | |
| 950 | 205,0-207,0 | 970 | 700 | 195,0-199,0 | 100 | 130,0-179,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 778 | | | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-2 |
| C-Nx | 3 392 779 | | | | | | | |
| 025 | 190,0-200,0 | 1030-40 | 1000 | 191,0-201,0 | 100 | 130,0-170,0 | 300 | 19-0-25 |
| 020 | 150,0 200,0 | 1000 10 | 900 | 178,0-188,0 | | , | | ,. |
| C-Nr. | 4 392 781 | | | | | | | |
| 025 | 228,0-238,0 | 1050-60 | 900 | 205,0-215,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 207,0-217,0 | | | | |
| C-Nr. | 4 392 953 | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-N- | 4 393 095 | | | | | | | |
| 050 | 211,0-221,0 | 1060-80 | 900 | 210,0-220,0 | 100 | 130,0-170,0 | 300 | 19-0-29 |
| J J U | | | 700 | 238,0-248,0 | | ,,0 | | , |
| C-Nr. | 4 393 307 | | | | | | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| | | | - | • | | | | • |
| | 4 393 431 | 1070 | 900 | 230,0-235,0 | 100 | 130,0-170,0 | 3 ሀሀ | 10 0-25 |
| 050 | 208,0-214,0 | 10/0 | 700 | 260,0-266,0 | 100 | 100,0-170,0 | 500 | 13,072 |
| C-Nr | 4 393 821 | | | | | | | |
| 050 | 242,0-248,0 | 1070 | 900 | 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | _ 12,0 210,0 | · - • - | 700 | 230,0-236,0 | | ,. | | , |

| <u>6.5</u> | ettings for Fu | ei aflectic | MI PUN | ib with Little | 90 G0 | Aethor | | |
|------------|--|-------------|---------------|--|---------|-------------------------------|----------|------------|
| Control | d delivery rod stop temp. 40°C (104°F) (2) | Breakaway (| Control | d delivery 2 Hod stop temp. 40°C (104°F) | - Inde | fuel delivery (6) ng point | LOW 10 | le speed 5 |
| revimin | | | 9 rev/min | | són/min | cm ³ /1000 strokes | rejv/mur | travel |
| 1 | _ 2 | 3 | - | | 6 | 7 | 8 | - |
| | | | · | • | • | • | • | • |
| | . 4 393 823 | | | | | | | |
| 1050 | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | . 4 393 825 | | | | | | | |
| 1050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | . 4 393 827 | | | | | | | |
| 1050 | 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 393 829 | | | | | | | |
| 1050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 393 831 | · | | | | | | |
| 1050 | 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | | 130,0-170,0 | - | - |
| AC-Nr. | 4 393 833 | | | | | | | |
| 1050 | 204,0 | 1060-1080 | 900 | 280,5 | 100 | 130,0-170,0 | 300 | 19 0-25 (|
| AC No. | · | | | 200,0 | | 100,0 170,0 | 300 | 13,0-23,0 |
| 1050 | 4 393 835 | 4070 | 000 | 040 0 046 0 | | ••• | | |
| 1050 | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | | 130,0-170,0 | 300 | 19,0,25,0 |
| ΔĊ-N∽ | 4 393 837 | | | • | | | | |
| 1050 | 227,0-233,0 | 1070 | 900 | 200 0 244 0 | 4.00 | 120 0 170 0 | 200. | |
| 1030 | 227,0-233,0 | 1070 | 700 | 208,0-214,0 247,0-253,0 | | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 393 890 | | | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 120 0 170 0 | 200 4 | 24 0 07 0 |
| | | 330 | 750 | 190,0-202,0 | 100 | 130,0-170,0 | 300 / | |
| | 4 393 891 | | • • • | | | | | |
| 955 | 208,0 | 965-975 | 895 | 203,0 | - | | • | - |
| AC-Nr. | 4 393 961 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 001 | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 3 |)7 N_32 N |
| | | | - | | | | Z | .,,0-33,0 |
| | 4 394 017 | 000 | 750 | 406 0 000 0 | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 21,0-27,0 |
| AC-Nr. | 4 394 020 | | | | | | | |
| 700 | 249,0-257,0 | 725 | 600 | 258,0-264,0 | 100 | 130,0-170,0 | 300 1 | 9,0-29,0 |

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| C. | Settings | for Fuel | Injection | Pump with | Fitted Governor |) |
|----|-----------------|----------|-----------|-----------|------------------------|---|

| Control | d delicary rod stop temp. 40°C (104°F) (2) | Breakaway Intermediate ape | 20 Full-k Contr | pad delivery of rod stop oil temp. 40°C (104°F) | ノ ldle ゛ | fuel delivery 6 | Low id | le speed 5 |
|---------|--|-------------------------------|--------------------|---|----------|-------------------------------|---------|--------------|
| rev/min | | rev/min | rev/m | | 1 | cm ³ /1000 strokes | rév/min | travel mm |
| | 12 | 3 | | 2 | - 6 | 7 | 8 | - |
| AC-Nr | . 4 394 062 | | | | | | | |
| 800 | 113,0-119,0 | 820 | 600 | 102,0-108, | 0 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| AC-Nr. | . 4 394 064 | | | •••••• | | , | | |
| 875 | 161,0-165,0 | 890 | 600 | 140,0-144, | 0 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| AC-Nr. | . 4 394 066 | | | | | | | |
| 800 | 125,0-131,0 | 820 | 600 | 134,0-140, | 0 100 | 130,0-170-0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 068 | | | | | | | |
| 1025 | 192,0-198,0 | 1045 | 900 | 180,0-186, | 0 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 070 | | | | | | | |
| 1000 | 200,0-206,0 | 1020 | 800 600 | 180,0-186,0 189,0-195,0 | | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 072 | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | | - | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 |
| AC-Nr. | 4 394 074 | | | | | | | |
| 1025 | 230,0-236,0 | 1040 | 900 70 0 | 207,0-213,0 209,0-215,0 | | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 076 | | | | | | | |
| 1000 | 227,0-233,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 078 | | | | | • | • | |
| 1000 | 235,0-241,0 | 1020 | 700 | 263,0-269,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 080 | | | | | | | |
| 1000 | 220,0-226,0 | 1020 | 800 600 | 209,0-215,0 227,0-233,0 | | 130,0-170,0 | 300 1 | 9,0,25,0 |
| AC-Nr. | 4 394 082 | | | | | | | |
| 910 | 190,0 | 930 | • | - | 100 | 130,0-170,0 | 300 2 | 5,0 |
| AC-Nr. | 4 394 084 | | | | | | | |
| 900 | 160,0-166,0 | 920 | 700 | 139,0-145,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 086 | | | | | | | |
| 600 | 124,0-130,0 | 620 | - | - | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 088 | | · · | | | | | |
| 700 | 127,0-133,0 | 720 | 600 | 124,0-130,0 | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| | 4 394 090 | | | | | | | |
| 800 | 139,0-145,0 | 820 | 600 | 124,0-130,0 | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |

| C. | Settings | for | Fuel | m | jection Pump | with | Fitted | Governor |
|----|-----------------|-----|-------------|---|--------------|------|---------------|----------|

| Control | d delivery rod slop | Breakaway | | foad delivery troi-rod stop | <u> </u> | Idle | fuel delivery (| <u>اس ا</u> | idle speed 5 |
|----------------|-------------------------------|--------------|------------|---------------------------------------|----------|---------|-----------------|-------------|----------------------------------|
| | temp. 40°C (104°F) (2 | ~ | | od temp. 40°C (10 min cm²/1000 s | | rev/min | 1 | revin | Control rod travel un i mm |
| rev/min | cm ² /1000 strokes | rev/min 3 | revi | min cm 710001 | HOKES | 6 | 7 | 8 | 9 |
| | | | | | | | | | |
| AC-Nr. | . 4 394 092 | | | | | | | | |
| 925 | 157,0-163,0 | 945 | 800 600 | | | 100 | 130,0-170 | .0 300 | 19,0-25,0 |
| AC-Nr. | 4 394 094 | | | | | | | | |
| 1000 | 180,0-186,0 | 1020 | 800 700 | 154,0-1 142,0-1 | | 100 | 130,0-170, | .0 300 | 19,0-25,0 |
| AC-Nr. | 4 394 096 | | | | | | | | |
| 1050 | 207,0-213,0 | 1070 | 900 800 | 161,0-1 147,0-1 | | 100 | 130,0-170, | 0 300 | 19,0-25,0 |
| AC-Nr. | 4 394 098 | | | | | | | | |
| 900 | 187,0-193,0 | 920 | 700 | 162,0-1 | 68,0 | 100 | 130,0-170, | 0 300 | 27,0-33,0 |
| AC-Nr. | 4 394 100 | | | | | | | | |
| 900 | 200,0-206,0 | 920 | 700 | 184,0-1 | 90,0 | 100 | 130,0-170, | 0 300 | 27,0-33,0 |
| AC-Nr. | 4 394 102 | | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-2 | 15,0 | 100 | 130,0-170, | 0 300 | 19,0-25,0 |
| AC-Nr. | 4 394 104 | | | | | | | | |
| 750 | 185,0-191,0 | 770 | 600 | 222,0-2 | 28,0 | 100 | 130,0-170, | 0 300 | 19,0-25,0 |
| AC-Nr. | 4 394 106 | | | | | | | | |
| 800 | 210,0-218,0 | 820 | 600 | 223,0-2 | 29,0 | 100 | 130,0-170, | 0 300 | 19,0-25,0 |
| AC-Nr. | 4 394 108 | | | | | | | | |
| 1050 | 222,0-228,0 | 1070 | 900 700 | 202,0-2 207,0-2 | | 100 | 130,0-170, | 0 300 | 19,0-25,0 |
| 42.11 | | | 700 | 207,0-2 | 13,0 | | | | |
| AC-Nr. 1000 | 4 394 110 240,0-246,0 | 1020 | 000 | 224 0 2 | 20.0 | 400 | 422 0 472 | | |
| 1000 | 240,0-240,0 | 1020 | 800 600 | 224,0-2 237,0-2 | | 100 | 130,0-170, | 0 300 | 19,0-25,0 |
| AC-Nr. | 4 394 112 | | | | | | | | |
| 1050 | 245,0-251,0 | 1070 | 900 700 | 224,0-23 237,0-2 | | 100 | 130,0-170, | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 114 | | | | | | | | |
| 1000 | 217,0-223,0 | 1020 | 800 600 | 197,0-20 219,0-2 | | 100 | 130,0-170, | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 116 | | | | | • | | | |
| 900 | 210,0-216,0 | 920 | 700 | 2:2,0-21 | 18,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| AC-Nr. | 4 394 118 | | | | | | | | |
| 1050 | 269,0-275,0 | 1070 | 900 700 | 281, 0-28 293, 0-29 | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |

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Testoil-ISO 4113

620

| C. Settings | for Fuel I | njection | Pump with | Fitted Governor |
|-------------|------------|-----------------|-----------|-----------------|
| | | | | |

| <u> </u> | ttings for FL | iei uilec | | b with Litte | <u> </u> | | I ou id | le speed |
|---------------------------|----------------------|--------------|---------|-------------------------------|----------|-------------------------------|------------|-------------|
| Full-load (Control-re | nd stoo | Breakaway | Control | | Idio | fuel delivery (6) | 10 | le speed 5 |
| | mp. 40°C (104°F) (2) | j | | emp. 40°C (104°F) | awitchin | , | | Control roo |
| ten/umu | cm³/1000 strokes | rev/min 3 | rev/min | cm ³ /1000 strokes | 6 | cm ³ /1000 strokes | rev/min | 9 |
| · | 1 | | | | 1 | | 1 | |
| NC-Nr. | 4 394 120 | | | | | | | |
| 050 | 234,0-240,0 | 1070 | 900 | 246,0-252,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 268,0-274,0 | | | | |
| AC-Nr. | 4 394 122 | | | | | | | |
| 050 | 262,0-268,0 | 1070 | 900 | 279,0-285,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 289,0-295,0 | | | | |
| NC-Nr. | 4 394 124 | | | | | | | |
| 050 | 241,0-247,0 | 1070 | 900 | 265,0-271,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 268,0-274,0 | | | | |
| AC-Nr. | 4 394 126 | | | | | | | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 128 | | | • | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC No | 4 394 130 | | | | | | | |
| NC-Nr. | | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 800 | 239,0-245,0 | 020 | 000 | 240,0-254,0 | 100 | 130,0-170,0 | 300 | 13,0-23 |
| | 4 394 132 | | | | | | | |
| 000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | (9,0~25 |
| lC-Nr. | 4 394 134 | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| IC-řir. | 4 394 136 | | | | | | • | |
| 000 | 255,0-261,0 | 1020 | 800 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 600 | 270,0-276,0 | | | | |
| C-Nr. | 4 394 138 | | | | | | | |
| 050 | 239,0-245,0 | 1070 | 900 | 233,0-239,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | • | 700 | 273,0-279,0 | | | | |
| C-Nr. | 4 394 140 | | | | | | | |
| 000 | 215,0-221,0 | 1020 | 800 | 197,0-203,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | 600 | 220,0-226,0 | | | | |
| C-Nr. | 4 394 142 | | | | | | | |
| 900 | 222,0-228,0 | 920 | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 144 | | | | | | | |
| 050 | 257,0~263,0 | 1070 | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| | | | | | | | | J = |
| | 4 394 148 | 4075 | 000 | 200 0 245 2 | 400 | 120 0 170 0 | | 05.0 |
| 050 | 295,0-303,0 | 1075 | 900 | 309,0-315,0 | 100 | 130,0-170,0 | 300 | 45,U |

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| | range tot t | | | with Fitte | <u>- ~</u> | | 1 2 | |
|--|-------------------------------|---------------------------------|--------------|-------------------------------|------------------------------|------------------|-----------------------|---------------------------|
| Full-load of Control-ro Test oil ter | | Breakaway 20 intermediate speed | I Control-ro | | Starting idle awitchir | fuel delivery 6 | LOW '14' | le speed 5 Control rod |
| rev/min | cm ² /1000 strokes | rev/min 49 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | r e v/min 8 | travel mm |
| | | <u> </u> | | | - | | - | |
| AC-Nr. | 4 394 150 | | | | | | | |
| 1050 | 268,0-274,0 | 1070 | 900 700 | 274,0-280,0 280,0-286,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 152 | | | | | | | |
| 050 | 262,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 154 | | | | | | | |
| 050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| lc-iir. | 4 394 156 | | | | | | | |
| 1050 | 296,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| \C-Nr. | 4 394 158 4 394 157 | | | | | | | |
| 050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 160 | | | | | | | |
| 050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 162 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 164 | | | | | | | |
| 925 | 176,0-182,0 | 945 | 800 700 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 166 | | | | | | | |
| 900 | 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 168 | | | | | | | |
| 925 | 237,0-243,0 | 945 | 800 700 | 251,0-257,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| C-Nr. | 4 394 170 | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| C-Nr. | 4 394 176 | | | | | | | |
| | 213,0-219,0 | 1070 | 900 700 | 212,0-218,0 240,0-246,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |

| way (20) Fuel delivery characteristics (5e) Starting fuel delivery (6) Con 1016 Speed 5 | ' |
|---|----------|
|---|----------|

| Full-load o | | Breakaway (| 20 Fuel del | very characteristics (5e | Starting | fuel delivery 6 | Low id] | e speed 5 |
|---------------------------|----------------------------------|--------------------|-------------|-------------------------------|----------|------------------|---------|--------------|
| Control-ro Test oil te | nd stop mp. 40°C (104°F) (2) | intermediate speed | | poed ® | switchin | g point | | Control rod |
| rev/min | cm³/1000 strokes | rev/min | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rév/min | travel mm |
| 1 | 2 | 3 | - 4 | 5 | 6 | 7 | 8 | 9 |
| A C _ N 100 | 4 394 246 | • | • | | • | • | • | |
| 1050 | 211,0-220,0 | 1055-107 | 5 975 | 237,5-247, | 0 100 | 130,0-170, | 0 200 | 10 0-25 |
| 1030 | 211,0-220,0 | 1035-107 | 700 600 | 258,5-269, 255,5-266, | 5 | 130,00170, | 300 | 13,0-23 |
| | stop part posi t stop part po | | | | | | | |
| • | 4 394 248 | | | | | | | |
| 700 | 246,0 | 720 | | | 100 | 130,0-170, | 300 | 19,0-25 |
| 600 | 263,0 | | | | | | | |
| AC-Nr. | 4 394 250 | | | | | | | |
| 1050 | 244,5-254,5 | 1060-108 | 0 | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 257 | | | | | | | |
| 600 | 258,0 | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| AC-Nr. | 4 394 314 | | | | | | | |
| | 246,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 900 700 | 240,0 267,0 | | | | | | | |
| | • | | | | | | | |
| 4C-Nr. 1050 | 4 394 331 241,0-247,0 | 1070 | | | 400 | 120 0 170 (| 200 | 40 0 05 |
| 900 | 265,0-271,0 | 10/0 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 | 268,0-274,0 | | | | | | | |
| AC-Nr. | 4 394 332 | | | | | | | |
| 1050 900 | 268,0-274,0 274,0-280,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 | 280,0-286,0 | | | | | | | |
| \C-Nr. | 4 394 347 | | | | | | | |
| 1050 | 269,0-275,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25. |
| 900 700 | 281,0-287,0 293,0-299,0 | | | | | • | | |
| | | | | | | | | |
| | 4 394 348 | 4070 | | | 400 | 400 0 1=1 = | | 40 0 00 |
| 050 900 | 234,0-240,0 246,0-252,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 | 268,0-274,0 | | | | | | | |
| C-Nr. | 4 394 349 | | | | | | | |
| | 208,0-214,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 900 | 230,0-236,0 | | | | | | | |

900 700 260,0-266,0

AC-Nr. 4 394 350

1050 900 700 262,0-268,0 279,0-285,0 289,0-295,0

1070

100 130,0-170,0 300 19,0-25,0

| C. | Settings | for Fuel | Injection | Pump with | Fitted | Governor |
|----|----------|----------|------------------|-----------|---------------|----------|
|----|----------|----------|------------------|-----------|---------------|----------|

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| Full-load delivery Breakaway (20) Fuel delivery characteristics (5) Starting fuel delivery (6) Low idle speed 5) | | | | | | | | | | | | |
|--|------------------------------------|---------|---|-------------|------------------|---------|---------------|---------|-------------|--|--|--|
| Control | rod stop temp. 40°C (104°F) (2) | | | high idle s | peed (Sb) | idle | ing point | | Control rod | | | |
| rev/min | 1 2 2 2 2 | rev/min | • | rev/min | cm³/1000 strokes | rev/min | 1 | rev/min | travel | | | |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8_ | 9 | | | |
| | | | | | | 1 | | | 1 | | | |
| C-Nr | | 4070 | | | | | | | | | | |
| 050 900 | 253,0-256,0 252,0-258,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, | | | |
| 700 | 269,0-275,0 | | | | | | | | | | | |
| C-Nr. | . 4 394 352 | | | | | | | | | | | |
| 050 | 262,0-268,0 | 1070 | | | | 100 | 130,0-170,0 | 300 - | 10 0-25 | | | |
| 900 | 267,0-273,0 | ,,,, | | | | | 100,0 170,0 | 500 | 19,0-25, | | | |
| 700 | 267,0-273,0 | | | | | | | | | | | |
| C-Nr. | . 4 394 353 | | | | | | | | | | | |
| 050 | 279,0-285,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 19,0-25, | | | |
| 900 700 | 283,0-289,0 293,0-299,0 | | | | | | | | | | | |
| C-Nr. | . 4 394 354 | | | | | | | | | | | |
| 050 | 296,0-302,0 | 1070 | | | | 100 | 120 0-170 0 | 200 4 | 0.00 | | | |
| 900 | 301,0-307,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | | | |
| 700 | 309,0-315,0 | | | | | | | | | | | |
| -Nr. | 4 394 356 | | | | | | | | | | | |
|)50 | 246,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | | | |
| 900 700 | 240,0 267,0 | | | | | | | | • | | | |
| | • | | | | | | | | | | | |
| Nr. | 4 394 386 | 620 | | | | 400 | | | | | | |
| - | 167,0-175,0 | 620 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 | | | |
| | 4 394 390 | | | | | | | | | | | |
| 00 | 259,0-267,0 238,0-246,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-29,0 | | | |
| _ | - | | | • | | | | | | | | |
| | 4 394 428 | 4405 | | | | | | | | | | |
| 00 00 | 188,0-196,0 180,0-187,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 | | | |
| _ Ni sa | 4 394 473 | | | • | | | | | | | | |
| 50 | 189,0-197,0 | 875 | | | | 400 | 400 0 470 0 | | | | | |
| 50 50 | 185,0-193,0 | 0/3 | | | | 100 | 130,0-170,0 | 325 3 | 0,0 | | | |
| -Nr. | 4 394 501 | | | | | | | | | | | |
| | 175,0 | 925 | | | | 100 | 130,0-170,0 3 | 200 40 | | | | |
| | 158,0 | | | | | .00 | 150,0-170,0 | 15 | 7,0~25,0 | | | |
| -Nr. | 4 394 521 | | | | | | | | | | | |
| | 239,0-247,0 | 1025 | | | | 100 | 130,0-170,0 3 | 100 SE | 5.0 | | | |
| | 229,0-235,0 | | | | | | | L. | ,,,, | | | |
| Nr. | 4 394 527 | | | | | | | | | | | |
| | 161,0 | 925 | | | | 100 | 130,0-170,0 3 | 00 10 | .n-25 n | | | |
|)G | 151,0 | | | | | · | | IS | ,,,,,,,,,, | | | |

| | ttings for Fu | | | | | | Low id | le speed 3 |
|---------------------------|-------------------------------|-----------------------------|--------------------------|--|------------------|------------------------------|---------|------------------------------|
| Full-load (Control-re | | Breakaway 2b | Fuel deln high idle t | very characteristics(56 lpect) (Sh) | | fuel delivery 6 | | |
| rev/miņ | cm ² /1000 strokes | rev/min 40 | | cm ³ /1000 strokes | 1 | cm³/1000 strokes | rev/mir | Control root travei mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| IC-Nr | 4 394 541 | 1 | • | 1 | 1 | • | • | 1 |
| 1050 | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 200 | 10 0 25 |
| | • | 1000 1000 | • | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 4 394 550 | 4040 4000 | | | | | | |
| 000 | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 4 394 561 | | | | | | | |
| 050 900 | 258,0 256,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | • | | | | | | | |
| | 4 394 564 | 4.070 | | | | | | |
| 050 900 | 244,0 234,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr | 4 394 569 | | | • | | | | |
| 000 | 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 | รบบ | 10 0-25 |
| | | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. 050 | 4 394 590 | 1000 1000 | | | 400 | 400 0 470 0 | | |
| | 260,5-271,0 ing of movemen | 1060-1080 ht: 0.40 - 0.4 | 15 har | at 750 PRM : | | 130,0-170,0 90 har nressu | | |
| e "02 | 0". | | 10 041 | 40 700 1141 1 | 211 a 0 5 | 50 bu. p. c550 | ,,,, | gup 31100 |
| C-Nr. | 4 394 593 | | | | | | | |
| 050 | 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 703 | | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | 900 | 267.0-278.0 | 100 | 130,0-170,0 | 300 | 19-0-25 |
| ilt e | top part posit | ion to obtain | 700 | 267,0-278,0 | İ | | | • |
| btain | mean curve at | ove. Beginniı | ng of i | movement: 0, | 40 - 0 | ,45 bar at 75 | O PRI | M and O, |
| - | essure, gap sh | ould be "020' | • | | | | | |
| | 4 394 705 4 394 706 | | | | | | | |
| | 258,0 | 1060-1080 | | | 100 | 130,0-170 3 | 300 | 19,0-25 |
| 000 | 256,0 | | • | | | | | |
| -Nr. | 4 394 707 | | | | | | | |
| | 244,0 234,0 | 1070 | • | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | | | | | |
| | 4 394 718 | | | | | | | |
| | 198,0-213,0 196,0-210,0 | 965-975 | | | 100 | 130,0-170,0 | 300 | 21,0-27, |
| | 4 394 719 | | | | | | | |
| | 4 394 719 166,0-168,0 | 01.5 | • | | 400 | 400 0 455 6 | | |
| | 142,5-146,5 | 915 | | | 100 | 130,0-170,0 | 300 2 | 21,0-27, |
| -Nr. 4 | 4 394 733 | | | | | | | |
| | 255,0-261,0 | 1020 | | | 100 | 130,0-170,0 | 200 4 | 0 0 05 |
| - 4 | | | | | 100 | 130,071/0,0 | วบบ ไ | J.U-25. |
| | 272,0-278,0 270,0-276,0 | | | | | | | - , , |

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| Full-load | BILINGS TOF PU | Breakaway (26) | Sue dell | very characteristics (58) | Starting | | Low idle speed 5 | | |
|--------------------|---|--------------------|----------|-------------------------------|------------------|-------------------------------|------------------|--------------|--|
| | rod stop temp. 40°C (104°F) 2 | intermediate speed | . I | (a) | idle switchir | • | | Control rod | |
| rev/min. | 1 | rev/min 40 | rev/min | cm ³ /1000 strokes | i . | cm ³ /1000 strokes | rév/min | travel mm | |
| | 2 | 3 | 14 | 5 | 6 | 7 | 8 | 9 | |
| AC-Nr | . 4 394 740/741 | | | | | | | | |
| 1020 915 | 213,0-226,0 208,0-218,0 | 1030-1040 | | | | | | | |
| AC-Nr. | . 4 394 744 | | | | | | | | |
| 1050 900 | 250,0 256,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | . 4 394 745 | | | | | | | | |
| 950 750 | 208,0-214,0 196,0-202,0 | 990 | | | 100 | 130,0-170,0 | 300 | 21,0-27,0 | |
| AC-Nr. | . 4 394 746 | | | | | | | | |
| 875 600 | 161,0-165,0 140,0-144,0 | 890 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | . 4 394 771 | | | · | | | | | |
| 800 600 | 113,0-119,0 102,0-108,0 | 820 | | | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 | |
| AC-Nr. | 4 394 773 | | | | | | | | |
| 800 600 | 125,0-131,0 134,0-140,0 | 820 | | | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 | |
| AC-Nr. | 4 394 775 | | | | | | | | |
| 1025 900 | 192,0-198,0 180,0-186,0 | 1045 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| AC-Nr. | 4 394 777 | | | | | | | | |
| 1000 800 600 | 200,0-206,0 180,0-186,0 189,0-195,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| AC-Nr. | 4 394 779 | | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | • | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| AC-Nr. | 4 394 781 | | | | | | | | |
| 1025 900 700 | 230,0-236,0 207,0-213,0 209,0-215,0 | 1049 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| AC-Nr. | 4 394 783 | | | | | | | | |
| 000 800 | 227,0-233,0 197,0-203,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| 1C-Nr. | 4 394 785 | | • | | | | | | |
| 1000 700 | 235,0-241,0 263,0-269,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |

| C. \$ | Settings | for Fuel | Injection | Pump with | Fitted Governor | |
|-------|----------|----------|-----------|------------------|-----------------|--|
|-------|----------|----------|-----------|------------------|-----------------|--|

| Full-load o | d stop | Breakaway | 3 | Fuel delin | rery characteristics (5a peed (5b) | idle | fuel delivery 6 | Low idle speed 5 | |
|-------------------|---|-------------------|----------|------------|------------------------------------|----------|--|------------------|-----------------------|
| | mp. 40°C (104°F) (2) | intermediate spec | ⊕ | rev/min | cm ³ /1000 strokes | switchin | g point cm ³ /1000 strokes | rev/min | Control rod travel |
| rev/min 1 | cm ³ /1000 strokes | rev/min 3 | | 4 | 5 | 6 | 7 | 8 | |
| <u> </u> | | | | | | | | 1 | 1 |
| IC-Nr. | 4 394 787 | | | | | | | | |
| 000 800 600 | 220,0-226,0 209,0-215,0 227,0-233,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 789 | | | | | | | | • |
| 910 | 190,0 | 930 | | | | 100 | 130,0-170,0 | 300 | 25,0 |
| C-Nr. | 4 394 791 | | | | | | | | |
| 900 700 | 160,0-166,0 139,0-145,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 793 | | | | | | | | |
| 600 | 124,0-130,0 | 620 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 795 | | | | • | | | | |
| 700 600 | 127,0-133,0 124,0-130,0 | 720 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 797 | | | | | | | | |
| 800 600 | 139,0-145,0 124,0-130,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 799 | | | | | | | | |
| 925 800 600 | 157,0-163,0 145,0-151,0 134,0-140,0 | 945 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 801 | | | | | | | | |
| 800 | 180,0-186,0 154,0-160,0 142,0-148,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 803 | | | | | | | | |
| 900 | 207,0-213,0 161,0-175,0 147,0-153,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| \C-Nr. | 4 394 805 | | | | | | | | |
| 900 700 | 187,0-193,0 162,0-168,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| IC-Nr. | 4 394 807 | | | | | | | | |
| 900 700 | 200,0-206,0 184,0-190,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 394 809 | | | | | | | | |
| 900 700 | 203,0-209,0 209,0-215,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |

| . Settings for Fuel Injection Pump with Fitted Gov | emor |
|--|------|
|--|------|

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| | | | Breakaway 20 Fuel delivery characteristics (50 high ide speed (50) | | | Starting i | uel delivery 6 | Low idle speed 5 | |
|----------------------------|-------------------------------|------------------|--|-------------|------------------|------------|------------------|------------------|-------------|
| Control-ro Test oil ter | d \$100 np. 40°C (104°F) 2 | intermediate apo | 6 | I MOD COS (| (3) | switchin | g póint | | Control rod |
| ten/wiú | cm ³ /1000 strokes | rev/min | (4) | rev/min | cm³/1000 strokes | 1 1 | cm³/1000 strakes | rev/min | mm . |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 |
| IC-Nu | 4 394 811 | | | • | | | | | |
| | | 770 | | | | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 750 600 | 185,0-191,0 222,0-228,0 | 770 | | | | 100 | 130,0-170,0 | 300 | 13,0-25 |
| AC-Nr. | 4 394 813 | | | | | | | | |
| 800 600 | 210,0-218,0 223,0-229,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 815 | | | | | | | | |
| 1050 | 222,0-228,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 700 | 202,0-208,0 207,0-213,0 | | | | | | | | |
| AC-Nr. | 4 394 817 | | - | | | | | | |
| 1000 | 240,0-246,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 600 | 224,0-230,0 237,0-243,0 | | | | · | | | | |
| AC-Nr. | 4 394 819 | | | | | | | | |
| 1050 | 245,0-251,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 700 | 224,0-230,0 237,0-243,0 | | | | | | | | |
| NC-Nr. | 4 394 821 | | | | | | | | |
| 000 | 217,0-223,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 600 | 197,0-203,0 219,0-225,0 | | | | | | | | |
| IC-Nr. | 4 394 823 | | | | | | | | |
| 900 | 210,0-216,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| 700 | 212,0-218,0 | | | | | | | | |
| IC-Nr. | 4 394 825 | | | | | | | | |
| | 269,0-275,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 281,0-287,0 293,0-299,0 | | | | | | | | |
| IC-Nr. | 4 394 827 | | | | | | | | |
| 050 | 234,0-240,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 | 246,0-252,0 | | | | | | | | , |
| 700 | 268,0-274,0 | | | | | | | | |
| C-Nr. | 4 394 829 | | | | | | | | |
| | 262,0-268,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 279,0-285,0 289,0-295,0 | | | | | | | | |
| | • | | | | | | | | |
| | 4 394 831 | 4000 | | | | 400 | 400 0 470 0 | 000 | |
| | 241,0-247,0 265,0-271,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | , 130 | | | | | | | | |

| | | | |
|----|----------------|----------------|---------------------------|
| C. | Settings for I | Fuel Injection | Pump with Fitted Governor |

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| C. S | ettings for l | Fuel Injec | | | | | vernor | |
|--------------------|---|--------------------|----------|------------------|---------------------------|---------|-------------------------------|------------------------------------|
| Contro | ad delivery H-rod stop | Breakaway | ② | Fuel deli | very characteristics (3a) | | fuel delivery 6 | Low idle speed 5 |
| Test o | | 2) intermediate so | _ | 1 | • | ŀ | ing point | Control rod tr ave l |
| rev/mi | | rev/min | • | rev/min | cm³/1000 strokes | rev/min | cm ³ /1000 strokes | rev/min mm 8 9 |
| 1- | 2 | 3 | | - | 5 | 6 | | 8 9 |
| A.C. No. | 4 204 202 | | | | | | | |
| | . 4 394 833 | | | | | | | |
| 900 700 | 232,0-238,0 253,0-259,0 | 920 | | | | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | . 4 394 835 | | | | | | | • |
| 750 700 | 244,0-250,0 253,0-259,0 | 770 | | | | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | . 4 394 837 | | | | | | | |
| 800 | 239,0-245,0 | 820 | | | | 100 | 130.0-170.0 | 300 19,0-25,0 |
| 600 | 248,0-254,0 | 010 | | | | 100 | 130,0 170,0 | 300 13,0-25,0 |
| AC-Nr. | . 4 394 839 | | | | | | | |
| 1000 800 | 212,0-218,0 230,0-236,0 | 1020 | | | | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | . 4 394 841 | | | | | | | |
| 900 700 | 288,0-294,0 287,0-293,0 | 920 | | | | 100 | 130,0-170,0 | 300 27,0-33,0 |
| AC-Nr. | 4 394 843 | | | | | | | |
| 1000 | 255,0-261,0 | 1020 | | | | 100 | 130,0-170,0 | 300 19,0-25,0 |
| 800 600 | 272,0-278,0 270,0-276,0 | | | | | | | |
| AC-Nr. | 4 394 845 | | | | | | | |
| 1050 900 700 | 239,0-245,0 233,0-239,0 273,0-279,0 | 1070 | | | | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | 4 394 847 | | | | | | | |
| 1000 | 215,0-221,0 | 1020 | | | \ - | 100 | 130.0-170.0 3 | 300 19,0-25,0 |
| 800 600 | 197,0-203,0 220,0-226,0 | | | | | | | |
| AC-Nr. | 4 394 849 | | | | | | | |
| 900 700 | 222,0-228,0 254,0-260,0 | 920 | | | | 100 | 130,0-170,0 3 | 300 19,0-25,0 |
| AC-Nr. | 4 394 851 | | | | | | | |
| 1050 750 | 257,0-263,0 272,0-278,0 | 1070 | | | | 100 | 130,0-170,0 3 | 800 27,0-33,0 |
| lC-Nr. | 4 394 853 | | | | | | | |
| 050 900 | 295,0-303,0 309,0-315,0 | 1075 | | | | 100 | 130,0-170,0 3 | 00 25,0 |
| IC-Nr. | 4 394 857 | | | | | | | |
| 050 | 262,0-268,0 | 1070 | | | | 100 | 130,0-170,0 3 | 00 19,0-25,0 |
| | 267,0-273,0 267,0-273,0 | | | - المستعبر إلى ا | | | _ | |
| . •• | | T | 00 | tail | 150 11 | 12 | 1 | |

H9

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| Control | 1 delivery rod stop lemp. 40°C (104°F) (2) | Breakaway (| 20 Fuel del | ivery characteristics (5e | 'i idie | fuel delivery 6 | Low idl | e speed 5 |
|--------------------|--|-------------|-------------------|---|---------|-------------------------------|---------|-----------|
| rev/min | cm³/1000 strokes | rev/min (| 43 rev/min | cm³/1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travel |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | 1 | | 1 | 7 |
| AC-Nr. | 4 394 861 | • | | | | | | |
| 1050 900 700 | 296,0-302,0 301,0-307,0 309,0-315,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| lc-Nr. | 4 394 863 | | | | | | | |
| 900 700 | 253,0-256,0 252,0-258,0 269,0-275,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| NC-Nr. | 4 394 865 | | | | | | | |
| 1050 900 700 | 208,0-214,0 230,0-236,0 260,0-266,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| IC-Nr. | 4 394 867 | | | | | | | |
| 900 700 | 181,0-187,0 172,0-178,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 869 | | | | | | | |
| 925 800 700 | 176,0-182,0 162,0-168,0 177,0-183,0 | 945 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| c-Nr. | 4 394 871 | | | | | | | |
| 900 800 | 173,0-179,0 160,0-166,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 873 | | | | | • | | |
| 925 800 700 | 237,0-243,0 251,0-257,0 269,0-275,0 | 945 | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| C-Nr. | 4 394 875 | | | | | | | |
| 700 600 | 218,0-224,0 240,0-246,0 | 720 | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| C-Nr. | 4 394 877 | | | | | | | |
| 050 900 700 | 213,0-219,0 212,0-218,0 240,0-246,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 879 | | | | | | | |
| 050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | 100 | 130,0-170,0 | 19,0- | 25,0 |

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

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| | | | | | | • | • | | |
|----|----------|-------|----|--------|--------|-----------------|---|---------------|----------|
| C. | Settings | for F | ue | el Inj | ection | Pump wit | h | Fitted | Governor |

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| AC-Nr. 700 600 | 4 394 881 246,0 263,0 4 394 883 | rev/min 4 | rev/min 4 | cm³/1000 strokes 5 | awitchir rev/min 6 | cm³/1000 strokes 7 | rev/min 8 | Control rod travel mm |
|----------------------|--|--------------|--------------|-----------------------|--------------------------|-----------------------|--------------|-----------------------------|
| 700 600 AC-Nr. | 4 394 881 246,0 263,0 | | | 5 | 6 | 7 | 8 | 9 |
| 700 600 \C-Nr. | 246,0 263,0 | 720 · | | | | | • | I |
| 700 600 NC-Nr. | 246,0 263,0 | 720 | | | | | | |
| 600 AC-Nr. | 263,0 | 720 | | | | | | |
| | 4 394 883 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 1050 | | | | | | | | |
| | 244,5-254,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 885 | | | | | | | |
| 600 | 258,0 | | | | 100 | 130,0-170,0 | 300 | 27,0 |
| lc-Nr. | 4 394 891 | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| C-Nr. | 4 394 893 | | | | | | | ٠ |
| | 259,0-267,0 | 925 | | | 100 | 130,0-170,0 | 300 | 19,0-29, |
| | 238,0-246,0 | | | | | | | |
| | 4 394 895 _. 188,0-196,0 | 1025 | | | 100 | 120 0 170 0 | 200 (| 35 0 |
| | 180,0-187,0 | | | | 100 | 130,0-170,0 | 300 / | 10,0 |
| C-Nr. 4 | 394 897 | | | | | | | |
| | 189,0-197,0 | 875 | | | 100 | 130,0-170,0 | 325 3 | 30,0 |
| | 185,0-193,0 | | | | | | | |
| | 394 899 | 025 | * | | 400 | 400 0 470 0 | | |
| | 75,0 58,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. 4 | 394 905 | | | | | | | |
| | 39,0-247,0 | 1025 | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| 700 2 | 29,0-235,0 | | | | | | | |
| | 394 907 | | | | | | | |
| | 61,0 51,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | ng of movement r pressure, ga | | | | nd | | | |
| C-Nr. 4 | 394 909 | | | | | | | |
| 050 2 | 02,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. 4 | 394 911 | | | | | | | |
| 000 2 | 30,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| :-Nr. 4 | 394 915 | | | | | | | |
| 000 2 | 03,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load d Control-ro Test oil ten | d stop | intermediate speed | high idle t | | Starting idle awitchir | iodi daniely (b) | Low idl | e speed 5 |
|---|-------------------------------|--------------------|-------------|------------------|------------------------|-------------------------------|---------|--------------|
| rev/min | cm ³ /1000 strokes | rev/min 4a | rev/min | cm³/1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travei mm |
| , | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | 1 | | | | | |

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AC-Nr. 4 394 917

1050 260,5-271,0 1060-1080

100 130,0-170,0 300 19,0-25,0

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and

0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 919

1050 215,5-261,5 1060-1080

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 921

1050 260,5-271,0

900 1060-1080

267,0-278,0 100 130,0-170,0 300 19,0-25,0

700 267,0-278,0

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above. Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 925

1050 244,0 1070

100 130,0-170,0 300 19,0-25,0

900 234,0

AC-Nr. 4 394 997

900 173,0-179,0 800 160,0-166,0 920

100 130,0-170,0 300 19,0-25,0

Festoil-ISO 4113

Test Specifications Fuel Injection Pumps ① and Governors

WPP 001/4 ALO 16,0 c

PE 6 P 120/420 LS 152

ROV 300...800 PA 175 KR

0 401 846 242 ; 0 401 846 243 1 - 5 - 3 - 6 - 2 - 4

companyAllis-Chalmers engine 16000-25000

Values only apply to test nozzle-and-holder assembly 0 681 443 022 and fuel-injection test tubing 9 681 230 703.

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2,8 + 0,1

mm (from BDC)

| Rotational speed | Control rod travel mm | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 | |
|------------------|-----------------------------|---|---|----------------------------------|--|--|--|
| 1000 | 12 | 26,4 - 27,1 | | | 1,0 | | |
| 600 | 6 12 | 8,6 - 9,8 26,3 - 28,2 | | | | | |
| 200 | 15 6 | 33,8 - 36,2 4,2 - 5,2 | | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| Upper rated speed | | | Intermediate rated speed | | | Lower rated | speed | Stiding sleeve travel | | |
|-------------------|---------------------------------|---|---------------------------------------|--------------|-------------------------------|---|--------------------------|------------------------------------|---------------|-----------------|
| Degree of | rev/min Control rod trave | Control rod travel mm rev/min 28 | Degree of deflection of control lever | rev/min 5 | Control rod travel mm 4 | Degree of deflection of control lever 7 | rev/min 8 | Control rod travel mm 3 | rev/min 10 | (1) mm 11 |
| 66° | 875 900 980 1060 | 15,0-17,6 12,9-15,4 3,2- 8,0 0 | | | | 10° | 120 200 350 550 | 6,3-8,0 4,9-7,1 1,7-3,1 0 | | |
| | | | | | | (3a) | | | | |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Control-rod stop | | Rotational-speed (2b) Fuel delivery characteristics (5e) limitation intermediate speed (5b) | | Starting Idle switchir | | Torque-control 5 travel Control rod travel | | |
|------------------|------------------|---|---------|-------------------------------|---------|---|---------|----|
| rev/min | cm³/1000 strokes | rev/min 40 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | mm |
| ١. | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Chacking values in brackets

* 1 mm less control rod travel than col. 2

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| Full-los Contro | Id delivery Hood stop Lemp. 40°C (104°F) (2 | Breakaway | @ | Full-load (| Selivery (2) | Starting | fuel delivery 6 | Low id | Control rod |
|--------------------|---|-----------|----|-------------|----------------------------|----------|-------------------------------|--------|-------------|
| revimu | | rev/min | | rev/min | cm³/1000 strokes | rev/min | cm ³ /1000 strokes | rev/mi | travel |
| 1- | 2 | 3 | | 1 | 2 | 6 | 7 | 8 | 9 |
| • | | • | • | | • | • | • | • | • |
| _ | . 4 320 754 | 4040 | _ | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 7 | 00 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | . 4 320 793 | | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 7 | 00 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 815 | | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | | 00 00 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 816 | | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 8 | 00 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 817 | | | | | | | | |
| 1100 | 139,0-143,0 | 1120 | | 00 00 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| AC-Nr. | 4 320 829 | | | | | | | | |
| 1100 | 139,0-143,0 | 1120 | | 00 00 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| AC-Nr. | 4 320 933 | | | | | | | | |
| 900 | 102,0-110,0 | 1040 | 80 | 00 | 107,0-116,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 320 939 | | | | | | | | e. |
| 900 | 98,5 + 3 | 1040 | 70 | 00 | 107,5 + 4 | 100 | 90,0-130,0 | 300 | 25,0 |
| ac-Nr. | 4 320 940 | | | | - | | • | | |
| 900 | 78,0- 86,0 | 1040 | 70 | 00 | 100,0-109,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| | 4 320 941 | | | | ,. | | 30,0 100,0 | | 23,0 |
| 1025 | 91,0- 93,0 | 1040 | 70 | າດ | 99,0-103,0 | 100 | 90,0-130,0 | 300 4 | 10 0 25 0 |
| | | 1010 | ,, | ,,, | JJ,0 10J,0 | 100 | 30,0-130,0 | 300 | 13,0-25,0 |
| 1000 | 4 320 942 122,0-124,0 | 1020 | 70 |)n | 126,0-130,0 | 100 | 00 0 420 0 | 200 | |
| | | 1020 | 70 | ,,, | 120,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| | 4 320 980 | 4400 | • | | | | | | |
| 900 | 108,0-116,0 | 1120 | 80 | U | • | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| C-Nr. | 4 320 981 | | | | | | | | |
| 900 | 111,0-119,0 | 1020 | 80 | 0 | 112,0-118,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| IC-Nr. | 4 321 016 | | | | | | | | |
| 750 | 95,0-101,0 | 1020 | 75 | 0 | 95,0-101,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| C-Nr. | 4 321 064 | | | | | | | | |
| 000 | 112,0 | 1030 | 80 | 0 | 112,5 | 100 | 90,0-130,0 | 300 | 25,0 |
| | | | | | | | • | | - 🗸 - |

| C. Settings for Fuel Injection Pump with Fitted Governor Starting fixed delivery | | | | | | | | | | |
|---|--------------------------|-----------|----------|---|---|-------------------------|-----------------------------|----------|--------------|--|
| Full-load of Control-10 Test oil te | | Breakaway | ③ | Full-load d Control-ro Test oil ter | elivery 2 d stop np. 40°C (104°F) | Starting Idle switching | fuel delivery 6 ig point | rom Jai | Control rod | |
| rev/min | cm³/1000 strokes | rev/min | • | tev/min | cm³/1000 strokes | rev/min | | reiv/min | travei mm | |
| 1 | 2 | 3 | | 1 | 2 | 6 | 7 | 8 | | |
| lC-Nr. | 4 359 816 | | | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25 | |
| NC-Nr. 900 | 4 359 826 97,0-103,0 | 910-920 | | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25 | |
| NC-Nr. 1100 | 4 359 828 139,0-143,0 | 1120 | | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19 | |
| AC-Nr. 1025 | 4 359 830 91,0- 93,0 | 1040 | | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25 | |
| NC-Nr. | 4 359 832 122,0-124,0 | 1020 | | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25 | |
| NC-Nr. 1050 | 4 392 693 205,0-215,0 | 1065-80 | | 900 | 167,0-177,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| NC-Nr. 900 | 4 392 695 149,0-155,0 | 920 | | - | - | - | - | 300 | 19,0-25 | |
| NC-Nr. 750 | 4 392 697 185,0-191,0 | 770 | | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| NC-Nr. 800 | 4 392 699 210,0-218,0 | 820 | | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| 900 | 4 392 701 203,0-209,0 | 920 | | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| IC-Nr. | 4 392 703 220,0-230,0 | 1060-70 | | 900 700 | 200,0-210,0 205,0-215,0 | | 130,0-170,0 | 300 | 19,0-25 | |
| NC-Nr. 1050 | 4 392 707 243,0-253,0 | 1060-80 | | 900 700 | 222,0-232,0 235,0-245,0 | | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. 000 | 4 392 709 217,0-223,0 | 1020 | | 800 600 | 197,0-203,0 219,0-225,0 | | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. 600 | 4 392 711 231,0-237,0 | 620 | | - | - | - | - | 300 | 19,0-25 | |

| Full-load | delivery | Breakaway | (20) Full-load | delivery (2) | Starting | undelivery 6 | Low id | e speed 5) |
|----------------|-------------------------------|-----------|----------------|-------------------------------|------------------|------------------|---------|---|
| Control | | | Control-1 | rod stop emp. 40°C (104°F) | ktie switchin | • | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min | revimin | cm³/1000 strokes | rev/min | cm³/1000 strokes | rev/min | traval mm |
| 1- | 2 | 3 | 1 | 2 | 6 | 7 | 8 | - |
| 40 No | A 202 745 | | | | | | | |
| AC-Nr. 1050 | 4 392 715 187,0-193,0 | 1070 | 900 | 174.0-180.0 | 100 | 130,0-170,0 | 300 | 19 0-25 |
| 1030 | 107,0-133,0 | 1070 | 700 | 175,0-181,0 | 100 | 100,0 170,0 | 300 | 13,0 23, |
| AC-Nr. | 4 392 717 | | | | | | | |
| 1050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 392 719 | | | | | | | |
| 1050 | 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| A.O. No. | 4 392 721 | | 700 | 214,0 220,0 | | | | |
| 1050 | 242,0-248,0 | 1070 | 900 | 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19-0-25- |
| 1030 | 242,0 210,0 | .0,0 | 700 | 230,0-236,0 | | ,. | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| AC-Nr. | 4 392 723 | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 392 725 | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 392 727 | | | | | | | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 392 729 | | | | | | | |
| 1000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300. | 19,0-25, |
| | 4 392 731 | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| - | 4 392 735 | 4070 | 000 | 000 0 000 0 | 400 | 400 0 470 0 | 200 | 40 0 05 |
| 1050 | 239,0-245,0 | 1070 | 900 700 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 392 737 | | | | | | | |
| 1000 | 215,0-221,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-25. |
| | | | 600 | 220,0-226,0 | | | | |
| | 4 392 739 | | | | | | | |
| 1050 | 207,0-213,0 | 1050 | 900 700 | 195,0-201,0 225,0-231,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 392 741 | | | | | | | |
| 1050 | 213,0-219,0 | 1070 | 900 | 202,0-208,0 | 100 | 130,0-170,0 | • | - |
| | | • | 700 | 230,0-236,0 | | | | |
| | 4 392 743 | | | | | | | |
| 1050 | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |

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| C. | Settings | for Fuel | Injection | Pump with | Fitted Governor |
|----|----------|----------|------------------|------------------|-----------------|

| Control | I delivery rod stop emp. 40°C (104°F) (2) | intermediate speed | | | Starting idle switching | fuel delivery 6 | Low id | Control rod |
|----------------|---|--------------------|-------------|----------------------------|-------------------------|------------------|---------|---|
| Less/Lunu | cm³/1000 strokes | | lev/min | cm³/1000 strokes | } | cm³/1000 strokes | rev/min | travel mm |
| <u> </u> | - 2 | 3 | | 2 | 6 | , | 8 | • |
| AC-Nr. | 4 392 747 | | | | | | | |
| 1050 | 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1050 | 4 392 749 230,0-234,0 | 1070 | | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1050 | 4 392 750 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 800 | 4 392 768 123,0-133,0 | 820 | 600 | 132,0-142,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 875 | 4 392 775/776 162,0-164,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 950 | 4 392 777 205,0-207,0 | 970 | 700 | 195,0-199,0 | 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| | 4 392 778 | 3.3 | | , | | | | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-27,0 |
| AC-Nr. 1025 | 3 392 779 190,0-200,0 | 1030-40 | 1000 900 | 191,0-201,0 178,0-188,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1025 | 4 392 781 228,0-238,0 | 1050-60 | 900 700 | 205,0-215,0 207,0-217,0 | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 |
| AC-Nr. 940 | 4 392 953 185,0-195,0 | 955-65 | - | - | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 |
| AC-Nr. 1050 | 4 393 095 211,0-221,0 | 1060-80 | 900 700 | 210,0-220,0 238,0-248,0 | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 |
| AC-Nr. 900 | 4 393 307 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 2 | 27,0-33,0 |
| AC-N . | 4 393 431 | | | | | | | • |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. 1050 | 4 393 821 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |

| Control4 Test oil to rev/min | rod stop smp. 40°C (104°F) (2) | Breakaway (| | | - Marie | fuel delivery (6) | l . | |
|------------------------------------|-----------------------------------|--------------------|------------|--|--------------|-------------------------------|----------------------------|-------------|
| Lev/tmiu | | intermediate apped | Testo | ed delivery 2 Hrod stop I temp. 40°C (104°F) | switchi | ng point | | Control roc |
| 1. | cm ³ /1000 strokes | rev/min (| rev/mii | cm³/1000 strokes | rev/min 6 | cm ³ /1000 strokes | r ei v/mii 8 | |
| | | | <u> </u> | | 1 | <u> </u> | | 1 |
| AC-Nr. | 4 393 823 | | (, | | | | | |
| 1050 | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 393 825 | | | | | | | |
| 1050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 393 827 | | | | | | | |
| 1050 | 200,0-206,0 | 1070 | 900 700 | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 1C-Nr. | 4 393 829 | | | | | | | |
| 1050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 393 831 | | | | | | | |
| 1050 | 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | 100 | 130,0-170,0 | - | • |
| iC-Nr. | 4 393 833 | | | | | | | |
| 050 | 264,0 | 1060-1080 | 900 | 280,5 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 393 835 | | | | | | | |
| 050 | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 | 19,0,25, |
| C-Nr. | 4 393 837 | | • | | | | | |
| 050 | 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300` | 19,0-25, |
| | 4 393 890 | | • | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-27, |
| C-Nr. | 4 393 891 | | | | | | | • |
| 955 | 208,0 | 965-975 | 895 | 203,0 | - | • - | | - |
| C-Nr. | 4 393 961 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 001 | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 27,0-33, |
| C-Nr. | 4 394 017 | | | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 21,0-27. |
| C-Nr. | 4 394 020 | | | | | - | | |
| | 249,0-257,0 | 725 | 600 | 258,0-264,0 | 100 | 130,0-170,0 | 300 1 | 19 0-29 1 |

| Contro | nd delivery Frod stop | Breakaway | 20 Full-ton Contro | ad delivery Frod stop | Idle | fuel delivery 6 | Low id | e speed 5 |
|--------|--|-----------|-----------------------|--|------|---|----------|---|
| rev/mw | temp. 40°C (104°F) (2) cm²/1000 strokes | rev/min | 1 Test of rev/mir | temp. 40°C (104°F) cm³/1000 strokes | 1 | ng point cm ³ /1000 strokes | rejv/mun | Control rod travel mm |
| 1 | 2 | 3 | -1- | _ 2 | 6 | 7 | 8 | 9 |
| • | • | • | · | • | • | | • | • |
| | . 4 394 062 | | | | | | | |
| 800 | 113,0-119,0 | 820 | 600 | 102,0-108,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr | . 4 394 064 | | | | | | | |
| 875 | 161,0-165,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr | 4 394 066 | | | | | | | |
| 800 | 125,0-131,0 | 820 | 600 | 134,0-140,0 | 100 | 130,0-170-0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 068 | | | | | | | |
| 1025 | 192,0-198,0 | 1045 | 900 | 180,0-186,0 | 100 | 130,0-170,0 | 300 1 | 19.0-25.0 |
| AC-Nr. | . 4 394 070 | | | | | · · · · · · · · · · · · · · · · · · · | | |
| 1000 | 200,0-206,0 | 1020 | 800 | 180,0-186,0 | 100 | 130,0-170,0 | 300 1 | 9.0 - 25.0 |
| | | | 600 | 189,0-195,0 | | , | | 2,0 20,0 |
| AC-Nr. | 4 394 072 | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | | - | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 074 | | | | | | | |
| 1025 | 230,0-236,0 | 1040 | 900 | 207,0-213,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25.0 |
| | | | 700 | 209,0-215,0 | | | | -,- 10,0 |
| AC-Nr. | 4 394 076 | | | | | | | |
| 1000 | 227,0-233,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 078 | | | | | , | • | |
| 1000 | 235,0-241,0 | 1020 | 700 | 263,0-269,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 080 | | | | | | | |
| 1000 | 220,0-226,0 | 1020 | 800 | 209,0-215,0 | 100 | 130,0-170,0 | 300 1º | 9.0.25.0 |
| | | | 600 | 227,0-233,0 | | • | | -,0,20,0 |
| | 4 394 082 | | | | | | | |
| 910 | 190,0 | 930 | • | - | 100 | 130,0-170,0 | 300 2 | 5,0 |
| AC-Nr. | 4 394 084 | | | | | | | |
| 900 | 160,0-166,0 | 920 | 700 | 139,0-145,0 | 100 | 130,0-170,0 3 | 300 19 | 9,0-25.0 |
| AC-Nr. | 4 394 086 | | | | | | | |
| 600 | 124,0-130,0 | 620 | - | - | 100 | 130,0-170,0 3 | 300 10 |).N-25 N |
| AC-Nr. | 4 394 088 | | | | | | 13 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| 700 | 127,0-133,0 | 720 | 600 | 124,0-130,0 | 100 | 130,0-170,0 3 |) | 0 00 0 |
| | 4 394 090 | | | 1,0 100,0 | . 50 | 100,0-1/0,0 3 | 15 | ,,u-25,U |
| 800 | 139,0-145,0 | 820 | 600 | 124,0-130,0 | 100 | 120 0 472 2 - | .00 | |
| | | JLV | JUU | 147,07130,0 | 100 | 130,0-170,0 3 | 19 | ,0-25,0 |

| | | | | • | | _ |
|---|----------|--------------|---------------------|---|---------|----------|
| | O-44! | 4 P 1 | Inicalian Pr | | | |
| | Serrings | tor rue: | Injection Pu | | ritea : | COACHIOL |
| - | | | | | | |

| AC-Nr. 925 AC-Nr. 1000 AC-Nr. 900 AC-Nr. 900 | 4 394 092 157,0-163,0 4 394 094 180,0-186,0 4 394 096 207,0-213,0 4 394 098 187,0-193,0 4 394 100 | 945 1020 | 800 600 800 700 900 800 | 145,0-151,0 134,0-140,0 154,0-140,0 161,0-175,0 | rev/min 6 | 130,0-170,0 | | |
|--|---|----------|--|--|--------------|-------------|--------|------------------|
| AC-Nr. 925 AC-Nr. 1000 AC-Nr. 900 AC-Nr. 900 | 4 394 092 157,0-163,0 4 394 094 180,0-186,0 4 394 096 207,0-213,0 4 394 098 187,0-193,0 | 945 | 800 600 800 700 | 145,0-151,0 134,0-140,0 154,0-160,0 142,0-148,0 | 100 | | 300 1 | 9,0-25, |
| 925 AC-Nr. 1000 AC-Nr. 1050 AC-Nr. 900 AC-Nr. 900 | 157,0-163,0 4 394 094 180,0-186,0 4 394 096 207,0-213,0 4 394 098 187,0-193,0 | 1020 | 800 700 900 | 134,0-140,0 154,0-160,0 142,0-148,0 | | | | |
| 925 AC-Nr. 1000 AC-Nr. 1050 AC-Nr. 900 AC-Nr. 900 | 157,0-163,0 4 394 094 180,0-186,0 4 394 096 207,0-213,0 4 394 098 187,0-193,0 | 1020 | 800 700 900 | 134,0-140,0 154,0-160,0 142,0-148,0 | | | | |
| AC-Nr. 1000 AC-Nr. 1050 AC-Nr. 1900 AC-Nr. 1900 | 4 394 094 180,0-186,0 4 394 096 207,0-213,0 4 394 098 187,0-193,0 | 1020 | 800 700 900 | 134,0-140,0 154,0-160,0 142,0-148,0 | | | | |
| 1000 AC-Nr. 6 1050 AC-Nr. 6 900 AC-Nr. 6 | 180,0-186,0 4 394 096 207,0-213,0 4 394 098 187,0-193,0 | | 700 900 | 142,0-148,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. 6 1050 AC-Nr. 6 900 AC-Nr. 6 | 4 394 096 207,0-213,0 4 394 098 187,0-193,0 | | 700 900 | 142,0-148,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| 1050 AC-Nr. 4 900 AC-Nr. 4 | 207,0-213,0 4 394 098 187,0-193,0 | 1070 | _ | 161.0-175.0 | | | | |
| AC-Nr. 6 900 AC-Nr. 6 | 4 394 098 187,0-193,0 | 1070 | _ | 161.0-175.0 | | | | |
| 900 \c-Nr. 4 900 | 187,0-193,0 | | | 147,0-153,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| NC-Nr. 4 | | | | | | | | |
| 900 | 4 394 100 | 920 | 700 | 162,0-168,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| | | | | | | | | |
| C-Nr. | 200,0-206,0 | 920 | 700 | 184,0-190,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| | 4 394 102 | | | | | | | |
| 900 2 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25. |
| C-Nn / | 4 394 104 | | | | | ,. | | -, - Lu, |
| | 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 200 1 | 0 0 25 |
| | · | ,,, | 000 | 22,0 220,0 | 100 | 130,0-170,0 | 300 1 | 7,0-23, |
| | 4 394 106 210,0-218,0 | 820 | 600 | 222 0 220 0 | 100 | 120 0 170 0 | 200 4 | 0 0 05 |
| | | 020 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 1 | J,U-25, |
| | 4 394 108 | 4474 | | | | | | |
| 050 2 | 222,0-228,0 | 1070 | 900 700 | 202,0-208,0 207,0-213,0 | 100 | 130,0-170,0 | 300 1 | €,0-25, |
| C_N:> 1 | 1 394 110 | • | | | | | | |
| | 240,0-246,0 | 1020 | 800 | 224,0-230,0 | 100 | 130,0-170,0 | 200 4 | 0 0 05 |
| 000 2 | 240,0 240,0 | 1020 | 600 | 237,0-243,0 | 100 | 130,0-170,0 | 300 1 | 1,U - 25, |
| C-Nr. 4 | 394 112 | | | | | | | |
| | 245,0-251,0 | 1070 | 900 | 224,0-230,0 | 100 | 130,0-170,0 | 300 19 | 9.0-25. |
| | | , | 700 | 237,0-243,0 | | | | |
| C-Nr. 4 | 394 114 | | | | | | | |
| 000 2 | 217,0-223,0 | 1020 | 800 600 | 197,0-203,0 219,0-225,0 | 100 | 130,0-170,0 | 300 19 |),0-25, |
| C-Nr. 4 | 394 116 | | | | | | | |
| 900 2 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 27 | ,0-33, |
| C-Nr. 4 | 394 118 | | | | | | | |
| | 69,0-275,0 | 1070 | 900 | 281,0-287,0 | 100 | 130,0-170,0 | 300 19 | .0-25.4 |

H20

| C. Settings | for Fue | l Injecti | on Pump with | Fitted G | overnor |
|-------------|----------------|-----------|--------------|----------|---------|
| _ | | | | | |

| Full-load (| delivery od stop | Breakaway | ② | Full-toad d | | Starting idle switching | Ruel delivery 6 | Low idle speed 5 | |
|--------------|---------------------|-----------|----------|--------------|-------------------------------|----------------------------|------------------|------------------|-----------|
| LEA/LUTU | cm³/1000 strokes | | • | rev/min | cm ³ /1000 strokes | 1 1 | cm³/1000 strokes | reiv/mun 8 | travel |
| | 2 | 3 | \dashv | ' | - | | | - | |
| AC-Nr. | 4 394 120 | | | | | | | | |
| 1050 | 234,0-240,0 | 1070 | | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 122 | | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | | 900 700 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 124 | | | | | | | | |
| 1050 | 241,0-247,0 | 1070 | | 900 700 | 265,0-271,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 126 | | | | | | | | |
| 900 | 232,0-238,0 | 920 | , | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 128 | | | | | | | | |
| 750 | 244,0-250,0 | 770 | | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 0C-N2 | 4 394 130 | | | | | | | | |
| 800 | 239,0-245,0 | 820 | | 600 | 248.0-254.0 | 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| | | | , | | ,. | | , | | ,,. |
| | 4 394 132 | 4000 | | 000 | 220 0 226 0 | 100 | 130,0-170,0 | 200 | 40 0 25 0 |
| 1000 | 212,0-218,0 | 1020 | • | 800 | 230,0-236,0 | 100 | 150,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 134 | | | | | | | | |
| 900 | 288,0-294,0 | 920 | | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| GC-Nr. | 4 394 136 | | | | | | | • | |
| 1000 | 255,0-261,0 | 1020 | | 800 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | (| 600 | 270,0-276,0 | | | | |
| AC-Nr. | 4 394 138 | | | | | | | | |
| 1050 | 239,0-245,0 | 1070 | | 900 | 233,0-239,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | | 700 | 273,0-279,0 | | | | |
| AC-Nr. | 4 394 140 | | | | | | | | |
| 1000 | 215,0-221,0 | 1020 | | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 142 | | | | | | | | |
| 900 | 222,0-228,0 | 920 | • | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 0C-N~ | 4 394 144 | | | | | | | | |
| 1050 | 257,0-263,0 | 1070 | • | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 27 0-33 0 |
| | • | 10/0 | , | , ,,, | L/L,U-L/U,U | 100 | 100,0 170,0 | J 00 | e/,u-JJ,U |
| | 4 394 148 | | | | | | | | |
| 1050 | 295,0-303,0 | 1075 | | 900 | 309,0-315,0 | 100 | 130,0-170,0 | 300 | 25,0 |

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| C. | Settings: | for Fuel in | iection P | ump with | Fitted | Governor |
|----|-----------|--------------|-----------|------------|--------|----------|
| v. | Cormido | 10: 1 46: 0: | gooden r | minh missi | Litten | COTCHING |

| C. Settings for Fuel injection Pump with Fitted Governor | | | | | | | | | |
|--|------------------------|--------------|------------|---|-----|------------------|----------|-----------|--|
| Full-load Control-re Test oil te | | Breakaway (2 | Control-re | Full-foad delivery 2 Starting fuel delivery idle leaf to the control rod stop Test oil temp. 40°C (104°F) | | , 0 | Contr | | |
| rev/min | cm³/1000 strokes | rev/min | revimin | cm³/1000 strokes | | cm³/1000 strokes | reiv/min | | |
| | 2 | 3 | - | 2 | 6 | 7 | 8 | 9 | |
| AC-Nr. | 4 394 150 | | | | | | | | |
| 1050 | 268,0-274,0 | 1070 | 900 700 | 274,0-280,0 280,0-286,0 | | 130,0-170,0 | 300 | 19,0-25, | |
| AC-Nr. | 4 394 152 | | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| AC-Nr. | 4 394 154 | | | | | | | | |
| 1050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| AC-Nr. | 4 394 156 | | | | | | | | |
| 1050 | 296,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| AC-Nr. | 4 394 158 4 394 157 | | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| AC-Nr. | 4 394 160 | | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| AC-Nr. | 4 394 162 | | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| AC-Nr. | 4 394 164 | | | | | | | | |
| 925 | 176,0-182,0 | 945 | 800 700 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| C-Nr. | 4 394 166 | | | | | | | | |
| 900 | 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25, | |
| C-Nr. | 4 394 168 | | | | | | | | |
| 925 | 237,0~243,0 | 945 | 800 700 | 251,0-257,0 269,0-275,0 | 100 | 130,0-170,0 | 300 2 | 27,0-33, | |
| C-Nr. | 4 394 170 | | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 27,0-33,0 | |
| C-Nr. | 4 394 176 | | | | | | | | |
| 050 | 213,0-219,0 | 1070 | 900 700 | 212,0-218,0 240,0-246,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |

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AC-Nr. 4 394 246

1050 211,0-220,0 1055-1075

975 700 237,5-247,0 258,5-269,5

600 255,5-266,0

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

| AC-Nr. | 4 | 394 | 248 |
|--------|---|-----|-----|
|--------|---|-----|-----|

| 700 | 246,0 |
|-----|-------|
| 600 | 263.0 |

720

100 130,0-170,0 300 19,0-25,0

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 250

1050 244,5-254,5

1060-1080 100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 257

600 258,0 130,0-170,0 300 27,0

AC-Nr. 4 394 314

| 246,0 |
|-------|
| 240,0 |
| 267,0 |
| |

1070

1070

1070

1070

1070

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 331

| 1050 | 241,0-247,0 | |
|------|-------------|--|
| 900 | 265 0-271 0 | |

268,0-274,0

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 332

700

| 1050 | 268,0-274,0 |
|------|-------------|
| 900 | 274,0-280,0 |
| | |

130,0-170,0 300 19,0-25,0

700 280,0-286,0

AC-Nr. 4 394 347

| 1050 | 269,0-275,0 |
|------|-------------|
| 900 | 281,0-287,0 |
| 700 | 293,0-299,0 |

100

130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 348

| 1050 | 234,0-240,0 |
|------|-------------|
| 900 | 246,0-252,0 |
| 700 | 268,0-274,0 |

130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 349

1050 208,0-214,0 1070 900 230,0-236,0

260,0-266,0

289,0-295,0

130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 350

700

700

1050 262,0~268,0 900 279,0-285,0

1070

100 130,0-170,0 300 19,0-25,0

| | d delivery rod slop | Breakaway | ② | Fuel delivery characteristics 5a | | Starting | fuel delivery 6 | Low id | lle speed 3 |
|---|----------------------------|--------------------|----------|----------------------------------|-------------------------------|----------|-------------------------------|--------|-------------|
| Control-rod stop Test oil temp. 40°C (104°F) 2 | | intermediate speed | | high ide speed (3) | | | ng point 1 | | Control roi |
| t e n\únu | cm³/1000 strokes | rev/min | (4) | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/ma | |
| 1 | _ 2 | 3 | | 4 | 5 | 6 | 7 | 8 | <u> </u> |
| , \C-Nr. | . 4 394 351 | • | | | • | • | • | • | • |
| 050 | 253,0-256,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 900 | 252,0-258,0 | | | | | | 100,0 170,0 | 500 | 13,0-23 |
| 700 | 269,0-275,0 | | | | | | | | |
| iC-Nr. | . 4 394 352 | | | | | | | | |
| 050 | 262,0-268,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19-0-25 |
| 900 | 267,0-273,0 | | | | | | | | .5,0 .5 |
| 700 | 267,0-273,0 | | | | | | | | |
| C-Nr. | 4 394 353 | | | | | | | | |
| 050 | 279,0-285,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 700 | 283,0-289,0 293,0-299,0 | | | | | | | | |
| | | | | | | | | | |
| | 4 394 354 | | | | , | | | | |
| 050 900 | 296,0-302,0 301,0-307,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 700 | 309,0-315,0 | | | | | | | | |
| C 11m | 4 204 256 | | | | | | | | |
| _ | 4 394 356 | 4.000 | | | | | | | |
| 050 900 | 246,0 240,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 | 267,0 | | | | | | | | |
| ^-Nr | 4 394 386 | | | | | | | | |
| 500 | 167,0-175,0 | 620 | | | | 400 | 120 0 170 0 | 200 | o= o |
| | • | 020 | | | | 100 | 130,0-170,0 | 300 | 25,0 |
| | 4 394 390 | | | | | | | | |
| 900 700 | 259,0-267,0 238,0-246,0 | 925 | | | | 100 | 130,0-170,0 | 300 | 19,0-29, |
| | • | | | • | | | | | |
| :-Nr. | 4 394 428 | | | | | | | | |
| 000 | 188,0-196,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| 100 | 180,0-187,0 | | | • | | | | | |
| -Nr. | 4 394 473 | | | | | | | | |
| 50 | 189,0-197,0 | 875 | | | | 100 | 130,0-170,0 | 325 3 | 30,0 |
| '50 | 185,0-193,0 | | | | | | | | |
| -Nr. | 4 394 501 | | | | | | | | |
| 00 | 175.0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 9.0-25. |
| 00 | 158,0 | | | | | | | | , |
| -Nr. | 4 394 521 | | | | | | | | |
| | 239,0-247,0 | 1025 | | | | 100 | 130,0-170,0 | 300 3 | 95 N |
| | 229,0-235,0 | - | | | | | ,. 170,0 | JUU 2 | |
| -Nr. | 4 394 527 | | | | | | | | |
| | 161,0 | 925 | | | | 100 | 120 0 470 0 | 202 4 | 0 0 07 |
| | 151,0 | 363 | | | | 100 | 130,0-170,0 | 3UU 1 | y,U-25,(|

| Full-load | | | | p with Fitte | 9 00 | · · · · · · · · · · · · · · · · · · · | | |
|--|--|---|------------------------|-------------------------------|-------------------------------|---------------------------------------|------------------------|---|
| Control-re | | Breakaway 2b | Fuel deli high idle | very characteristics (5e) | Starting Idle switching | fuel detivery 6 | Low id | le speed 5 |
| rev/min | cm ³ /1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | | cm ³ /1000 strokes | rev/mi | travel |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| AC-Nr. | . 4 394 541 | • | · | | • | | • | • |
| 1050 | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170, | 0 300 | 19.0-2 |
| AC-Nr. | 4 394 550 | | | | | • | | |
| 1000 | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170, | በ 300 | 19.0-2 |
| N-N2 | 4 394 561 | | | | | ,,., | 000 | 13,0 4. |
| 050 | 258,0 | 1060-1080 | | | 100 | 130,0-170, | n 300 | 10 0-26 |
| 900 | 256,0 | | | | 100 | 130,0-170, | 5 500 | 19,0-2 |
| IC-Nr. | 4 394 564 | | | | | | | |
| 050 | 244,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 | 234,0 | | | | | | | |
| | 4 394 569 | | | | | | | |
| 000 | 203,0-211,5 | 1010-1030 | | • | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 590 | 2 | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | | | | 130,0-170,0 | | - |
| Beginn De "02 | ing of movemen | t: 0,40 - 0, | 45 bar | at 750 PRM a | nd 0, | 90 bar press | ure, | gap shou |
| | 4 394 593 | • | | | | | | |
| 050 | 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| C-N~ | 4 394 703 | | | | | ,. | | , |
| · · · · · | 7 337 703 | | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | 900 | 267.0-278.0 | 100 | 130.0-170.0 | 300 | 19.0-25 |
| | 260,5-271,0 | 1060-1080 | 900 700 | 267,0-278,0 | | 130,0-170,0 | | |
| ilt s btain | top part posit mean curve ab | ion to obtai | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. | Adjust stop | part | position |
| ilt s btain ar pr | top part posit mean curve ab essure, gap sh | ion to obtai | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. | Adjust stop | part | position |
| ilt s btain ar pr | top part posit mean curve ab | ion to obtai | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. | Adjust stop | part | position |
| ilt s btain bar pr C-Nr. " | top part posit mean curve ab essure, gap sh 4 394 705 4 394 706 258,0 | ion to obtai | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. | Adjust stop | part 50 PR | positior M and O |
| ilt s btain bar pr C-Nr. " | top part posit mean curve ab essure, gap sh 4 394 705 4 394 706 | ion to obtai ove. Beginni ould be "020 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. / 0 - 0 | Adjust stop ,45 bar at 7 | part 50 PR | position M and O |
| ilt s btain bar pr C-Nr. 050 900 C-Nr. | top part posit mean curve ab essure, gap sh 4 394 705 4 394 706 258,0 256,0 | ion to obtai love. Beginni lould be "020 1060-1080 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. / 0 - 0 | Adjust stop ,45 bar at 7 | part 50 PR | position M and O |
| ilt s btain bar pr C-Nr. 050 C-Nr. | top part posit mean curve ab essure, gap sh 4 394 705 4 394 706 258,0 256,0 4 394 707 244,0 | ion to obtai ove. Beginni ould be "020 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. / 0 - 0 | Adjust stop ,45 bar at 7 | part 50 PR | positior M and 0, |
| ilt s btain bar pr C-Nr. 950 C-Nr. 950 050 | top part posit mean curve ab essure, gap sh 4 394 705 4 394 706 258,0 256,0 4 394 707 244,0 234,0 | ion to obtai love. Beginni lould be "020 1060-1080 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. 100 - 0 | Adjust stop ,45 bar at 7 | part 50 PR | positior M and 0, |
| ilt s btain bar pr C-Nr. 050 0-Nr. 050 000 C-Nr. | top part posit mean curve ab essure, gap sh 4 394 705 4 394 706 258,0 256,0 4 394 707 244,0 234,0 | ion to obtai ove. Beginni ould be "020 1060-1080 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. 7 0 - 0 100 | Adjust stop ,45 bar at 7 | part 50 PR 300 | positior M and 0, 19,0-25 |
| ilt s btain bar pr C-Nr. 050 0-Nr. 050 0-Nr. 055 | top part posit mean curve ab essure, gap sh 4 394 705 4 394 706 258,0 256,0 4 394 707 244,0 234,0 | ion to obtai love. Beginni lould be "020 1060-1080 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. 100 - 0 | Adjust stop ,45 bar at 7 | part 50 PR 300 | positior M and 0, 19,0-25 |
| ilt s btain bar pr C-Nr. 050 C-Nr. 050 C-Nr. 0555 | top part posit mean curve ab essure, gap sh 4 394 705 4 394 706 258,0 256,0 4 394 707 244,0 234,0 4 394 718 198,0-213,0 | ion to obtai ove. Beginni ould be "020 1060-1080 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. 7 0 - 0 100 | Adjust stop ,45 bar at 7 | part 50 PR 300 | positior M and 0, 19,0-25 |
| ilt s btain bar pr C-Nr. 050 0-Nr. 050 0-Nr. 055 000 0-Nr. | top part position mean curve ablessure, gap shows a 394 705 4 394 706 258,0 256,0 4 394 707 244,0 234,0 4 394 718 198,0-213,0 196,0-210,0 4 394 719 166,0-168,0 | ion to obtai ove. Beginni ould be "020 1060-1080 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. 7 0 - 0 100 | Adjust stop, 45 bar at 7 | 300 300 | position M and 0, 19,0-25 19,0-25 |
| ilt s btain bar pr C-Nr. 050 0-Nr. 050 0-Nr. 055 000 0-Nr. | top part position mean curve ablessure, gap shows 4 394 705 4 394 706 258,0 256,0 4 394 707 244,0 234,0 4 394 718 198,0-213,0 196,0-210,0 4 394 719 | ion to obtai love. Beginni lould be "020 1060-1080 1070 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. 100 - 0 100 100 | Adjust stop ,45 bar at 7 | 300 300 | position M and 0, 19,0-25 19,0-25 |
| ilt s btain bar pr C-Nr. 050 C-Nr. 050 C-Nr. 055 600 C-Nr. | top part position mean curve ablessure, gap shows a 394 705 4 394 706 258,0 256,0 4 394 707 244,0 234,0 4 394 718 198,0-213,0 196,0-210,0 4 394 719 166,0-168,0 | ion to obtai love. Beginni lould be "020 1060-1080 1070 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. 100 - 0 100 100 | Adjust stop, 45 bar at 7 | 300 300 | position M and 0, 19,0-25 19,0-25 |
| ilt s btain bar pr C-Nr. 050 C-Nr. 050 C-Nr. 055 C-Nr. 055 C-Nr. 000 | top part position mean curve abovessure, gap should be sure, gap s | ion to obtai love. Beginni lould be "020 1060-1080 1070 | 700 n quan ng of | 267,0-278,0 tity at 1050 | PRM. 100 - 0 100 100 | Adjust stop, 45 bar at 7 | 300 300 300 | position M and 0, 19,0-25 19,0-25 21,0-27, 21,0-27, |

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| C. Settings for Fuel Injection Pum | p with Fitted Governor |
|------------------------------------|------------------------|
|------------------------------------|------------------------|

| 1020 915 AC-Nr. 1050 900 | 4 394 213,0-208,0- | 740/741 -226,0 -218,0 | intermediate speed | ⊙ | Fuel delin high idle s rev/min 4 | cery characteristic ceed (50) cm³/1000 strokes | | idle switchin rev/min | fuel delivery g point cm ³ /1000 stro | (6) ikes | r dv/mi n 8 | Control rod travel |
|--|--|-----------------------------|--------------------|----------|---|--|---|-----------------------------|--|-------------|---------------------------|--------------------|
| AC-Nr. 1020 915 AC-Nr. 1050 900 | 4 394 213,0- 208,0- 4 394 250,0 256,0 | 740/741 -226,0 -218,0 | 1030-104 | • | _ | | • | rev/min | cm ³ /1000 stro | kes | | travel mm |
| AC-Nr. 1020 915 AC-Nr. 1050 900 | 4 394 213,0- 208,0- 4 394 250,0 256,0 | 226,0 218,0 | 1030-104 | 1 | 4 | 5 | | 6 | 7 | | 8 | 9 |
| 1020 915 AC-Nr. 1050 900 | 213,0- 208,0- 4 394 250,0 256,0 | 226,0 218,0 | | 0 | | | • | ' | l | | • | 1 |
| 915 AC-Nr. 1050 900 | 208,0- 4 394 250,0 256,0 | 218,0 | | 0 | | | | | | | | |
| 1050 900 | 250,0 256,0 | 744 | 1060-100 | | | | | | | | | |
| 900 | 256,0 | | 1050_100 | | | | | | | | | |
| AC-Nr | 4 394 | | 1000-1080 | 0 | | | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| MO-III . | | 745 | | | | | | | | | | |
| | 208,0- 196,0- | | 990 | | | | | 100 | 130,0-1 | 70,0 | 300 | 21,0-27, |
| AC-Nr. | 4 394 | 746 | | | | | | | | | | |
| | 161,0- 140,0- | | 890 | | | | | 100 | 130,0- | 70,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 | 771 | | | | • | | | | | | |
| | 113,0- 102,0- | | 820 | | | | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 | 773 | | | | | | | | | | |
| | 125,0- 134,0- | | 820 | | | | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 : | 775 | | | | | | | | | | |
| | 192,0- 180,0- | | 1045 | | | | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| AC-Nr. 4 | 4 394 7 | 777 | | | | | | | | | | |
| 800 1 | 200,0-2 180,0-1 189,0-1 | 186,0 | 1020 | | | | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25, |
| AC-Nr. 4 | 394 7 | 779 | | | | | | | | | | |
| 940 1 | 185,0-1 | 195,0 | 955-65 | | | | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 | 394 7 | 781 | | | | | | | | | | |
| 900 2 | 230,0-2 207,0-2 209,0-2 | 213,0 | 1040 | | | | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25,0 |
| AC-Nr. 4 | 394 7 | 83 | | | | | | | | | | |
| 1000 2 | 27,0-2 97,0-2 | 33,0 | 1020 | | | | | 100 | 130,0-1 | 70,0 | 300 1 | 19,0-25,0 |
| AC-Nr. 4 | 394 7 | 85 | | | • | | | | | • | | |
| 1000 2 | 35,0-2 63,0-2 | 41,0 | 1020 | | | | | 100 | 130,0-1 | 70,0 | 300 1 | 9,0-25,0 |

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| C. S | ettings | for Fuel | Injection Pump | with Fitted Governor |
|------|---------|----------|----------------|----------------------|
|------|---------|----------|----------------|----------------------|

| Full-toad | | Breakaway | (26) | Fuel delin | rery characteristics (5e) | | fuel delivery 6 | Low id | le speed 3 |
|---------------------------|---|-----------------|-------------|-------------|---------------------------|------------------|------------------|---------|--------------|
| Control-re Test oil te | od stop emp. 40°C (104°F) 2 | intermediate sp | •••d _ | high idle s | peed (Sb) | idle switchin | g point | | Control roo |
| rev/min | cm³/1000 strokes | rev/min | • | rev/min | cm³/1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 |
| | | • | | • | • | • | , | • | • |
| C-Nr. | | | | | | 400 | 450 0 470 0 | 000 | 40 0 00 |
| 800 800 600 | 220,0-226,0 209,0-215,0 227,0-233,0 | 1020 | | | | 109 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 789 | | | | | | | | |
| 910 | 190,0 | 930 | | | | 100 | 130,0-170,0 | 300 | 25,0 |
| r Na | 4 394 791 | | | | | | | | |
| _ | | 920 | | | | 100 | 130,0-170,0 | 300 | 19 0-25 |
| 900 700 | 160,0-166,0 139,0-145,0 | 920 | * | | | 100 | 13030 17030 | 300 | 15,0 20 |
| C-Nr. | 4 394 793 | | | | | | | | |
| 600 | 124,0-130,0 | 620 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 795 | | | | | | | | |
| 700 | 127,0-133,0 | 720 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 124,0-130,0 | | | | | | | | |
| C-Nr. | 4 394 797 | | | | | | | | |
| 800 | 139,0-145,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 124,0-130,0 | | | | | | | | |
| C-Nr. | 4 394 799 | | | | | , | | | |
| 925 | 157,0-163,0 | 945 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 600 | 145,0-151,0 134,0-140,0 | | | | | | | | |
| | • | | | | | | | | |
| C-Nr. | 4 394 801 | | | | | | | | |
| 000 800 | 180,0-186,0 154,0-160,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 142,0-148,0 | | | | | | | | |
| C_N- | 4 394 803 | | | | | | | | |
| | | 1070 | | | | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 050 900 | 207,0-213,0 161,0-175,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 13,0-25 |
| 800 | 147,0-153,0 | | | | | | | | |
| C-Nr. | 4 394 805 | | | | | | | | |
| 900 | 187,0-193,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| 700 | 162,0-168,0 | | | | | * - | | _ | J |
| C-Nr. | 4 394 807 | | | | | | | | |
| 900 | 200,0-206,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27.0-33 |
| 700 | 184,0-190,0 | JLV | | | | | 100,0 170,0 | | -,,0 55 |
| C-Nr. | 4 394 809 | | | | | | | | |
| 900 | 203,0-209,0 | 920 | 1. | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 209,0-215,0 | | | | | | • | | |

| C. Settings for Fuel <mark>Injection F</mark> | Pump with Fitted Governor |
|---|---------------------------|
|---|---------------------------|

-16-

| Full-load | | Breskaway 20 | Fuel delin | very characteristics (5a) | Starting I | fuel delivery 6 | Low idl | e speed 5 |
|---------------|---|--------------------|--------------|------------------------------------|--------------|--|---------------|-------------|
| Test oil te | Imp. 40°C (104°F) (2) | intormediate speed | 11001100 | 9 (S) | awitchin | | | Control rod |
| 1 Lean/Whù | cm ³ /1000 strokes | rev/min 49 | rev/min 4 | cm ³ /1000 strokes 5 | rev/min 6 | cm ³ /1 000 strokes 7 | reiv/min 8 | mm 9 |
| | | | - | | | | | |
| AC-Nr. | 4 394 811 | | | | | | | |
| 750 600 | 185,0-191,0 222,0-228,0 | 770 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 813 | | | | | | | |
| 800 600 | 210,0-218,0 223,0-229,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| lC-Nr. | 4 394 815 | | | | | | | |
| 900 700 | 222,0-228,0 202,0-208,0 207,0-213,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| IC-Nr. | 4 394 817 | • | | | | | | |
| | 240,0-246,0 224,0-230,0 237,0-243,0 | 1020 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 819 | | | | | | | |
| | 245,0-251,0 224,0-230,0 237,0-243,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4-394 821 | | | | | | | |
| | 217,0-223,0 197,0-203,0 219,0-225,0 | 1020 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 823 | | | | | | | |
| 900 700 | 210,0-216,0 212,0-218,0 | 920 | | | 100 | 130,0-170,0 | 300 2 | 27,0-33,0 |
| C-Nr. | 4 394 825 | | | | | | | |
| 900 | 269,0-275,0 281,0-287,0 293,0-299,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 827 | | | | | | | |
| 900 | 234,0-240,0 246,0-252,0 268,0-274,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 829 | | | | | | | |
| 900 | 262,0-268,0 279,0-285,0 289,0-295,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 831 | | | | | | | |
| 050 900 | 241,0-247,0 265,0-271,0 268,0-274,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |

| C. | Settings | for Fuel In | jection Pum | p with Fitt | ed Governor |
|----|-----------------|-------------|-------------|-------------|-------------|

-17-

| Full-load Control- Test oil t | | Breakaway 20 | | Fuel deli- high idle s | Fuel delivery characteristics (5a) Start high idle speed (5b) swite | | fuel delivery 6 | Low idle speed 5 | | |
|-------------------------------------|-------------------------------|--------------|-------|---------------------------|---|---------|-------------------------------|------------------|------------------|--|
| rev/min | cm ³ /1000 strokes | rev/min | • | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travel mm | |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | |
| ^ N | 4 204 022 | | | | | | | | | |
| c-Nr. 900 | 4 394 833 | 920 | | | | 400 | 120 0 170 0 | 200 4 | 0 0 05 | |
| 700 | 232,0-238,0 253,0-259,0 | 920 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| C-Nr. | 4 394 835 | | | | | | | | | |
| 750 | 244,0-250,0 | 770 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| 700 | 253,0-259,0 | | | | | | | | | |
| | 4 394 837 | | | | | | | | | |
| 800 600 | 239,0-245,0 248,0-254,0 | 820 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| C-Nr. | 4 394 339 | | | | | | | | | |
| 000 | 212,0-218,0 | 1020 | | | • | 100 | 130,0-170,0 | 300 1 | 9.0-25 | |
| 300 | 230,0-236,0 | | | | | | | | • | |
| C-Nr. | 4 394 841 | | | | | | | | | |
| 900 700 | 288,0-294,0 287,0-293,0 | 920 | | | | 100 | 130,0-170,0 | 300 2 | 7,0-33 | |
| | | | | | | | | | | |
| ,-Nr. 100 | 4 394 843 255,0-261,0 | 1020 | ø | | | 100 | 120 0 170 0 | 200 4 | 0 0 05 | |
| 300 | 272,0-278,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| 500 | 270,0-276,0 | | | | ٠ | | | | | |
| | 4 394 845 | | | | | | | | | |
|)50)00 | 239,0-245,0 233,0-239,0 | 1070 | | | | 100 | 130,0-170,0 | 300 19 | 9,0-25 | |
| 00 | 273,0-279,0 | | | | | | | | | |
| -Nr. | 4 394 847 | | | | | | | | | |
| | 215,0-221,0 197,0-203,0 | 1020 | | | | 100 | 130,0-170,0 | 300 19 | 9,0-25, | |
| | 220,0-226,0 | | | | | | | | | |
| -Nr. | 4 394 849 | | | | | | | | | |
| | 222,0-228,0 | 920 . | | | | 100 | 130,0-170,0 | 300 19 | 9,0-25 | |
| | 254,0-260,0 | | | | | | | | | |
| | 4 394 851 | 4070 | | | | 400 | 100 6 150 6 | | | |
| | 257,0-263,0 272,0-278,0 | 1070 | | | | 100 | 130,0-170,0 | 300 27 | / , U-33, | |
| -Nr. | 4 394 853 | | | | | | | | | |
| | 295,0-303,0 | 1075 | | | | 100 | 130,0-170,0 | 300 25 | 5.0 | |
| | 309,0-315,0 | | | | | | | | , | |
| -Nr. | 4 394 857 | | | | | | | | | |
| | 262,0-268,0 | 1070 | | | | 100 | 130,0-170,0 | 300 19 | ,0-25, | |
| | 267,0-273,0 267,0-273,0 | <u>r</u> | سيدوي | | 190 41 | | - | | | |

J5

-18-

| Full-load Control-r | | Breakaway (2 | Fuel deliningh ide s | very characteristics (5e) | Starting Idle switchir | fuel delivery 6 | Low idl | e speed 5) Control rod |
|---------------------------|---|--------------|----------------------|---|------------------------------|------------------|----------|------------------------|
| rev/min | cm ³ /1000 strokes | rev/min | ~ I | cm ³ /1000 strokes | | cm³/1000 strokes | reiv/min | travel |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |
| C-Nr. | 4 394 861 | | | | | | | |
| 050 900 700 | 296,0-302,0 301,0-307,0 309,0-315,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 863 | | | | | | | |
| 050 900 700 | 253,0-256,0 252,0-258,0 269,0-275,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 865 | | | | | | | |
| 050 900 700 | 208,0-214,0 230,0-236,0 260,0-266,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 867 | | | | | | | |
| 900 700 | 181,0-187,0 172,0-178,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 869 | | | | | | | |
| 925 800 7 00 | 176,0-182,0 162,0-168,0 177,0-183,0 | 945 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 871 | | | | | | | |
| 900 800 | 173,0-179,0 160,0-166,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 873 | | | | | | | |
| 925 800 700 | 237,0-243,0 251,0-257,0 269,0-275,0 | 945 | | | 100 | 130,0-170,0 | 300 2 | :/ , U-33, |
| C-Nr. | 4 394 875 | | | | | | | |
| 700 600 | 218,0-224,0 240,0-246,0 | 720 | | | 100 | 130,0-170,0 | 300 2 | 27,0-33, |
| C-Nr. | 4 394 877 | | | | | | | |
|)50 900 700 | 213,0-219,0 212,0-218,0 240,0-246,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 879 | | | | | | | : |
| 050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | 100 | 130,0-170,0 | 19,0- | 25,0 |

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

| C. | Settings | for Fuel Injection | n Pump wit | th Fitted | Governor |
|----|----------|--------------------|------------|-----------|----------|

-19-

| Full-load | | | | Starting idle | fuel delivery 6 | Low idle speed 5 | | |
|------------|------------------------------------|--------------------|----------------|-------------------------------|-----------------|-------------------------------|---------|-------------|
| Control- | emp. 40°C (104°F) 2 | intermediate speed | LINGS I COMP I | peed (So) | | ng point | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min 48 | rev/min | cm ³ /1000 strokes | 1. | cm ³ /1000 strokes | rev/min | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |
| AC-Nr. | 4 394 881 | | | | | | | |
| 700 600 | 246,0 263,0 | 720 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 883 | | | | | | | |
| 1050 | 244,5-254,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 885 | | | | | | | |
| 600 | 258,0 | | | | 100 | 130,0-170,0 | 300 2 | 27,0 |
| AC-Nr. | 4 394 891 | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | 100 | 130,0-170,0 | 300 2 | 25.0 |
| AC-Nr. | 4 394 893 | | | • | | | | • |
| 900 | 259,0-267,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 19.0-29.0 |
| 700 | 238,0-246,0 | | | | | ,.,. | | 3,0 23,0 |
| AC-Nr. | 4 394 895 | | | | | | | |
| 1000 | 188,0-196,0 | 1025 | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| 800 | 180,0-187,0 | | | | | | | |
| | 4 394 897 | | | | | | | |
| 850 750 | 189,0-197,0 185,0-193,0 | 875 | | | 100 | 130,0-170,0 | 325 3 | 80,0 |
| | · · | | | | | | | |
| 900 | 4 394 899 175,0 | 925 | | | 100 | 120 0 170 0 | 200.4 | 0 0 05 0 |
| 700 | 158,0 | 323 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 905 | | | | | | | |
| 1000 | 239,0-247,0 | 1025 | | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| 700 | 229,0-235,0 | | | | | | | |
| AC-Nr. | 4 394 907 | | | | | | | |
| 900 800 | 161,0 151,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| Beginn | ing of movement ar pressure, ga | | | | ıd | | | |
| AC-Nr. | 4 394 909 | | | | | | | |
| 1050 | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 911 | | | | | | | |
| | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25.0 |
| AC-Nr. | 4 394 915 | | | | | - | | |
| | 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 1º | 9.N-25 N |
| | | | | | . • • | ,,0,0 | I | -,0-60,0 |

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load di Control-roi Test oil ten | dister | intermediate apeed | nign iche s | | Starting Idle switchir | | Low idl | e speed 5 |
|---|-------------------------------|--------------------|-------------|------------------|------------------------------|-------------------------------|-----------|--------------|
| rev/min | cm ³ /1000 strokes | rev/min 40 | rev/min | cm³/1000 strokes | rev/min | cm ³ /1000 strokes | rev/min (| travei mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | • |
| 1 | | | | | | | | |

AC-Nr. 4 394 917

1050 260,5-271,0 1060-1080 100 130,0-170,0 300 19,0-25,0

-20-

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 919

1050 215,5-261,5 1060-1080

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 921

1050 260,5-271,0 1060-1080 900

267,0-278,0 100 130,0-170,0 300 19,0-25,0

700 267,0-278,0

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above. Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 925

1050 244,0 1070

100 130,0-170,0 300 19,0-25,0

900 234,0

AC-Nr. 4 394 997

900 173,0-179,0 800 160,0-166,0 920

100 130,0-170,0 300 19,0-25,0

Festoil-ISO 4113

Test Specifications Fuel Injection Pumps 1 WPP 001/4 ALO 16,0 d and Governors

PE 6 P 120 A 420 LS 245

ROV 300...1050 PA 154 KR

0 401 846 269

companyAllis-Chalmers

1 - 5 - 3 - 6 - 2 - 4 $$\rm engine\ 16000\text{-}25000\ Values\ only\ apply\ to\ test\ nozzle-and-holder\ assembly\ 0\ 681\ 443\ 022\ and\ fuel-injection$ test tubing 9 681 230 703.

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2,8 + 0,1

| Rotational speed rev/min 1 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference Control rod travel cm³/ 100 strokes mm 4 2 | | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|----------------------------|----------------------------------|--|--|--|--|--|
| 1000 | 12 | 26,4 - 27,1 | | | 1,0 | |
| 600 | 6 12 15 | 8,6 - 9,8 26,3 - 28,1 33,8 - 36,1 | | | | |
| 200 | 6 | 4,2 - 5,2 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| ı | Upper rated a | peed | | | Intermediate | rated spe | ed | Lower rated | speed | 4 | Sliding s | leeve travel |
|---|----------------------|---------------------------|--|------------|----------------------|---------------------|------|-----------------|--------------------------|------------------------------------|---------------|--------------|
| į | Degree of deflection | deflection Control travel | | | Degree of deflection | deflection travel d | | deflection trav | | Control rod travel | | |
| | | rod travel | mm rev/min | 2 3 | of control lever | rev/min | mm ④ | of control | rev/min | mm ③ | rev/min 10 | .mm 11 |
| ı | 1 | 2 | 3 | | 4 | 5 | 6 | ' | <u>^</u> | 9 | 10 | |
| | 66° | | 15,0-18, 10,7-15, 6,0-11, 0- 7, | ,0 ,6 | | | | 10° | 250 350 450 550 | 6,4-8,0 3,0-5,2 1,3-2,8 0 | | |
| | | | | | | | | 3a | | | | |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load of Control-ro Test oil ter | | limitation intermediate appead | 9, | | Starting Idle switchin | <u> </u> | Torque-control (travel Control r travel | |
|--|------------------|--------------------------------|---------|-------------------------------|------------------------------|-------------------------------|---|---|
| rev/min | cm³/1000 strokes | rev/min 😃 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |
| | | | | | 1 | | | |
| | 1 | | | | ł | | | · |
| İ | | | | | l | | | |
| | ļ | | | · | l | | | |
| 1 | | | | | l | • | | |
| ļ | | | | | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

| | C. | Settings | for Fuel | Injection | Pum | with: | Fitted | Governor |
|--|----|-----------------|----------|-----------|-----|-------|---------------|----------|
|--|----|-----------------|----------|-----------|-----|-------|---------------|----------|

-2-

| Contro | id delivery f-rod stop temp. 40°C (104°F) (2) | Breakaway (2 | Control | delivery 2 rod stop temp. 40°C (104°F) | Starting idle awitchir | fuel delivery 6 | Low 1d | le speed 5 |
|--------------|---|--------------|------------|--|------------------------|------------------------------------|--------------|------------|
| rev/mu | cm³/1000 strokes | rev/min @ | . . | | rev/min 6 | cm ³ /1000 strokes 7 | rev/min 8 | travel |
| | | <u> </u> | 1 | | | | | |
| AC-Nr. | . 4 320 754 | | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | . 4 320 793 | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 815 | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 320 816 | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 1 | 19,0-25,0 |
| AC-Nr. | 4 320 817 | | | | | | | |
| 1100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| AC-Nr. | 4 320 829 | | | | | | | |
| 1100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| AC-Nr. | 4 320 933 | | | | | | | |
| 900 | 102,0-110,0 | 1040 | 800 | 107,0-116,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 320 939 | | | | | | | • |
| 900 | 98,5 <u>+</u> 3 | 1040 | 700 | 107,5 <u>+</u> 4 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 320 940 | | | _ | | | | |
| 900 | 78,0- 86,0 | 1040 | 700 | 100,0-109,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 320 941 | | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 320 942 | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 320 980 | | | | | | | |
| 900 | 108,0-116,0 | 1120 | B00 | - | 100 | 90,0-130,0 | 375 | 9,0-19,0 |
| AC-Nr. | 4 320 981 | | | | | | | |
| 900 | 111,0-119,0 | 1020 | 300 | 112,0-118,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| AC-Nr. | 4 321 016 | | | | | | | |
| 750 | 95,0-101,0 | 1020 | 750 | 95,0-101,0 | 100 | 90,0-130,0 3 | 300 | 25,0 |
| AC-Nr. | 4 321 064 | | | | | | | • |
| 1000 | 112,0 | 1030 8 | 300 | 112,5 | 100 | 90,0-130,0 3 | 300 | 25,0 |
| | | | | | | | | |

110

| Full-load Control-n Test oil te | delivery od stop imp. 40°C (104°F) (2) | Breakaway (intermediate speed | Pull-load Control-n Test oil te | | Starting hidde awitching | pel delivery 6 | ron idj | Control rod |
|---------------------------------------|--|-------------------------------|---------------------------------------|----------------------------|-----------------------------|------------------|---------|--------------|
| ev/min | cm³/1000 strokes | rev/min (| rev/min | cm³/1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| | 2 | 3 | - | 2 | 6 | 7 | 8 | 9 |
| | • | • | | | | | | |
| C-Nr. | 4 359 816 | | | | 4.00 | 00 0 400 0 | | 40 0 05 |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | | 90,0-130,0 | 300 | 19,0-25 |
| | • | | 000 | ,,, , , | | | | |
| - | 4 359 826 | | | 00 0 404 0 | 400 | 00 0 400 0 | 200 | 40 0 25 |
| 900 | 97,0-103,0 | 910-920 | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 828 | | | | | | | |
| 100 | 139,0-143,0 | 1120 | 800 | 149,0-154,0 | | 90,0-130,0 | 375 | 9,0-19 |
| | | | 600 | 153,0-161,0 | | | | |
| C-Nr. | 4 359 830 | | | | | | | |
| 025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 832 | | | | | | | |
| 000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| | | | | | | | | |
| - | 4 392 693 | 1065-00 | 900 | 167,0-177,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 050 | 205,0-215,0 | 1065-80 | 300 | 107,0-177,0 | 100 | 15050 17050 | , 500 | 13,0 20 |
| C-Nr. | 4 392 695 | | | | | | | |
| 900 | 149,0-155,0 | 920 | - | - | • | • | 300 | 19,0-25 |
| C-Nr. | 4 392 697 | | | | | | | |
| 750 | 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nn | 4 392 699 | | | | | | | |
| 800 | 210,0-218,0 | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | | 020 | 000 | | | ,. | | , |
| | 4 392 701 | | 700 | 000 0 045 0 | 400 | 420 0 470 1 | 200 | 10 0 35 |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 703 | | | | | | | |
| 050 | 220,0-230,0 | 1060-70 | 900 | 200,0-210,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 205,0-215,0 | , | | | |
| C-Nr. | 4 392 707 | | | | | | | |
| 050 | 243,0-253,0 | 1060-80 | 900 | 222,0-232,0 | | 130,0-170, | 300 | 19,0-25 |
| | | | 700 | 235,0-245,0 | j | | | |
| c-Nr. | 4 392 709 | | | | | | | |
| 000 | 217,0-223,0 | 1020 | 800 | 197,0-203,0 | | 130,0-170, | 300 | 19,0-25 |
| | | | 600 | 219,0-225,0 | ; | | | |
| C-Nr. | 4 392 711 | | | | | | | |
| 600 | 231,0-237,0 | 620 | - | - | - | - | 300 | 19,0-25 |

| C. | Settings | for Fuel Injecti | on Pump with | Fitted Governor |
|----|----------|------------------|--------------|------------------------|

| Full-load Control- Test oil to | delivery rod stop emp. 40°C (104°F) (2 | Breakaway | Contro | nd delivery Hrod stop I temp. 40°C (104°F) | ' Idle ' | fuel delivery 6 ng point | Low id | Low idle speed 5 | | |
|--------------------------------------|--|-----------|------------|--|----------|--------------------------|---------|------------------|--|--|
| ten/uniu | cm ³ /1000 strokes | revitain | rev/mi | | 1 | cm³/1000 strokes | rev/mir | travel | | |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | 9 | | |
| | | | | | | | | • | | |
| | 4 392 715 | | | | | | | | | |
| 050 | 187,0-193,0 | 1070 | 900 700 | 174,0-180,0 175,0-181,0 | | 130,0-170,0 | 300 | 19,0-25 | | |
| C-Nr. | 4 392 717 | | | | | | | | | |
| 050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | | |
| C-Nr. | 4 392 719 | | | | | | | | | |
| 050 | 200,0-206,0 | 1070 | 900 | 190,0-196,9 | | 130,0-170, | 300 | 19,0-25 | | |
| | • • • | | 700 | 214,0-220,0 | • | | | | | |
| | 4 392 721 | 4070 | 000 | 000 0 000 0 | 100 | 400 0 470 4 | | | | |
| 050 | 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | | 130,0-170,0 | 300 | 19,0-25 | | |
| C-Nr. | 4 392 723 | | | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 160 | 130,0-170,0 | 300 | 19,0-25 | | |
| C-Nr. | 4 392 725 | | | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | | |
| C-Nr. | 4 392 727 | | | | | • | | | | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | | |
| C-Nr. | 4 392 729 | | | | | | | | | |
| 000 | 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | | |
| C-Nr. | 4 392 731 | | | | | | | | | |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 | | |
| C-Nr. | 4 392 735 | | | | | | | | | |
| 050 | 239,0-245,0 | 1070 | 900 700 | 233,0-239,0 273,0-279,0 | | 130,0-170,0 | 300 | 19,0-25 | | |
| C-Nr | 4 392 737 | | . 34 | ,,. | | | | | | |
| 000 | 215,0-221,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-25 | | |
| | | | 600 | 220,0-226,0 | | | | - | | |
| C-Nr. | 4 392 739 | | | | | | | | | |
| 050 | 207,0-213,0 | 1050 | 900 700 | 195,0-201,0 225,0-231,0 | | 130,0-170,0 | 300 | 19,0-25 | | |
| C_N. | 4 392 741 | | | | | | | | | |
| 050 | 213,0-219,0 | 1070 | 900 | 202,0-208,0 | 100 | 130,0-170,0 | · - | - | | |
| | | | 700 | 230,0-236,0 | | | | | | |
| C-Nr. | 4 392 743 | | | | | | | | | |
|)50 | 220,0-226,0 | 1070 | 900 700 | 210,0-216,0 243,0-249,0 | | 130,0-170,0 | 300 | 19,0-25 | | |

| Full-load | Stungs for Fu | Breakaway | (20) Full-toe | d delivery | Starting | fuel delivery (6) | Low idl | e speed 5) |
|------------------------|---------------------------------|-------------------|---------------|-------------------------------|------------------|-------------------|------------------------|-------------|
| Control- Test oil t | rod stop emp. 40°C (104°F) 2 | intermediale apec | d Test oil | temp. 40°C (104°F) | idle switchir | ng point | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min 3 | rev/min | cm ³ /1000 strokes | rev/min 6 | cm³/1000 strokes | rev <i>is</i> nin 8 | mm o |
| - | | | - 1 | | ļ | | - | - |
| AC-Nr. | 4 392 747 | | | | | | | |
| 1050 | 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 1050 | 4 392 749 230,0-234,0 | 1070 | • | - | 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| | 4 392 750 | | | | | | | ,,. |
| 1050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 800 | 4 392 768 123,0-133,0 | 820 | 600 | 132,0-142,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. 875 | 4 392 775/776 162,0-164,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 1 | 19.0-25.0 |
| | | 030 | 000 | 140,0 144,0 | 100 | 100,0 170,0 | 500 | |
| 950 | 4 392 777 205,0-207,0 | 970 | 700 | 195,0-199,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| _ | 4 392 778 | | | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 21,0-27,0 |
| AC-Nr. 1025 | 3 392 779 190,0-200,0 | 1030-40 | 1000 900 | 191,0-201,0 178,0-188,0 | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 |
| AC-Nr. | 4 392 781 | | | | | | | |
| 1025 | 228,0-238,0 | 1050-60 | 900 700 | 205,0-215,0 207,0-217,0 | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 |
| AC-Nr. | 4 392 953 | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | - | | 100 | 130,0-170,6 | 300 1 | 19,0-25,0 |
| AC-Nr. | 4 393 095 | | | | | | | |
| 1050 | 211,0-221,0 | 1060-80 | 900 700 | 210,0-220,0 238,0-248,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 393 307 | | | | | | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 2 | 27,0-33,0 |
| AC-Nr. | 4 393 431 | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 393 821 | | | | | | | |
| 1050 | 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |

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| Control | delivery rod stop emp. 40°C (104°F) (2) | Breakaway (| 3 | Al-load of ontrol-ro est oil ter | d stop mp. 40°C (104°F) | Starting Idle switchin | fuel delivery 6 | Low id | e speed 5 |
|---------|---|------------------|------------|--|----------------------------|------------------------------|---------------------------------------|---------|--------------|
| rev/min | cm³/1000 strokes | | <u>ان</u> | v/min | cm³/1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | + | | 2 | 6 | 7 | 8 | 9 |
| • | • | | • | | • | | | • | • |
| C-Nr. | 4 393 823 | | | | | | | | |
| 1050 | 187,0-193,0 | 1070 | 90 70 | | 174,0-180,0 175,0-181,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 393 825 | | | | | | | | |
| 050 | 224,0-230,0 | 1070 | 80 | 10 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 393 827 | | | | | | | | |
| 050 | 200,0-206,0 | 1070 | 90 70 | | 190,0-196,0 214,0-220,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| IC-Nr. | 4 393 829 | | | | | | | | |
| 050 | 230,0-234,0 | 1070 | - | | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 393 831 | | | | • | | | | |
| 050 | 213,0-219,0 | 1070 | 90 70 | | 202,0-208,0 230,0-236,0 | 100 | 130,0-170,0 | - | - |
| C-Nr. | 4 393 833 | | | | | | | | |
| 050 | 264,0 | 1060-1080 | 90 | 0 | 280,5 | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 |
| C-Nr. | 4 393 835 | | | | | | | | |
| 050 | 220,0-226,0 | 1070 | 90 70 | | 210,0-216,0 243,0-249,0 | 100 | 130,0-170,0 | 300 1 | 19,0,25,0 |
| C-Nr. | 4 393 837 | | | | | | | | |
| 050 | 227,0-233,0 | 1070 | 900 700 | | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300° 1 | 9,0-25,0 |
| C-Nr. | 4 393 890 | | À | | • | | | | |
| 950 | 208,0-214,0 | 990 | 750 |) | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 1,0-27,0 |
| C-Nr. | 4 393 891 | | | | | | | | • |
| 955 | 208,0 | 965-975 | 895 | 5 | 203,0 | - | | | - |
| C-Nr. | 4 393 961 | | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | } | 172,0-178,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| -Nr. | 4 394 001 | | | | | | | | |
| 00 | 218,0-224,0 | 720 | 600 |) : | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33.0 |
| -Nr. | 4 394 017 | | | | | | | | • |
| | 208,0-214,0 | 990 | 750 | | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 1.0-27.0 |
| -Nr- | 4 394 020 | | | | - | | • • • • • • • • • • • • • • • • • • • | | . , , . |
| | 249,0-257,0 | 725 | 600 |) ; | 258,0-264,0 | 100 | 130,0-170,0 | 300 1º | 9.N-20 N |
| | ,,• | - - • | | • | ,,0 | | ,/0,0 | I | J,U-LJ,U |

J14

-7-

| | ettings for Fu | Breakaway | | | · | | Low idle speed 5 |
|---------|--|-------------------|---------|--|---------|-------------------------------|---|
| Control | g garvery -rod stop temp. 40°C (104°F) (2) | intermediate aper | Control | d delivery 2 I rod stop temp. 40°C (104°F) | ldle | fuel delivery (6) ng point | Control rod |
| tea\unu | cm³/1000 strokes | rev/min | rev/min | cm³/1000 strokes | rev/min | cm³/1000 strokes | rdv/min mm |
| 1 | 2 | 3 | ! | 2 | 6 | 7 | В 9 |
| • | • | | • | • | • | • | • |
| | . 4 394 062 | | | | | | |
| 800 | 113,0-119,0 | 820 | 600 | 102,0-108,0 | 100 | 130,0-170,0 | 300 19,0-25, |
| AC-Nr. | . 4 394 064 | | | | | | |
| 875 | 161,0-165,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 19,0-25, |
| AC-Nr. | 4 394 066 | | | | | | |
| 800 | 125,0-131,0 | 820 | 600 | 134,0-140,0 | 100 | 130,0-170-0 | 300 19,0-25, |
| AC-Nr. | 4 394 068 | | | | | | , |
| 1025 | 192,0-198,0 | 1045 | 900 | 180,0-186,0 | 100 | 130.0-170.0 | 300 19,0-25, |
| AC-Nr. | 4 394 070 | | | | | | , |
| 1000 | 200,0-206,0 | 1020 | 800 | 180,0-186,0 | 100 | 130.0-170.0 | 300 19,0-25, |
| | | | 600 | 189,0-195,0 | | 100,0 170,0 | 300 13,0-23, |
| AC-Nr. | 4 394 072 | | | | | | |
| 940 | 185,0-195,0 | 955-65 | | - | 100 | 130,0-170,0 | 300 19,0-25, |
| AC-Nr. | 4 394 074 | | | | | | |
| 1025 | 230,0-236,0 | 1040 | 900 | 207,0-213,0 | 100 | 130.0-170.0 | 300 19,0-25, |
| | | | 700 | 209,0-215,0 | | , | |
| AC-Nr. | 4 394 076 | | | | | | |
| 1000 | 227,0-233,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | 4 394 078 | | | | | | • |
| 1000 | 235,0-241,0 | 1020 | 700 | 263,0-269,0 | 100 | 130,0-170,0 | 300 19,0-25,0 |
| AC-Nr. | 4 394 080 | | | | | | |
| 1000 | 220,0-226,0 | 1020 | 800 | 209,0-215,0 | 100 | 130.0-170.0 | 300 19,0,25,0 |
| | | | 600 | 227,0-233,0 | | | ,0,20, |
| AC-Nr. | 4 394 082 | | | | | | |
| 910 | 190,0 | 930 | - | - | 100 | 130,0-170,0 | 300 25,0 |
| AC-Nr. | 4 394 084 | | | | | | |
| 900 | 160,0-166,0 | 920 | 700 | 139,0-145,0 | 100 | 130,0-170,0 | 300 19.0-25.0 |
| C-Nr. | 4 394 086 | | | | | - | ,• |
| 600 | 124,0-130,0 | 620 | - | - | 100 | 130,0-170,0 | 300 19.0-25 0 |
| C-Nr. | 4 394 088 | | | | | ,, | , , |
| | 127,0-133,0 | 720 | 600 | 124,0-130,0 | 100 | 130 0-170 0 1 | 000 40 0 00 0 |
| | - | , EU | | 127,0-130,0 | , 00 | 130,0-170,0 | 19,0-25,0 |
| | 4 394 090 | 020 | 600 | 404 0 400 0 | 4.00 | 400 0 | |
| 800 | 139,0-145,0 | 820 | 600 | 124,0-130,0 | 100 | 130,0-170,0 3 | 300 19,0-25,0 |

J15

| | | * · · · · · · · · · · · · · · · · · · · | - · | |
|---------------|------------------|---|--------------|--|
| C. Settings | ≠ *** 1 1 | • - A • | | |
| C CACCIDAD | tat Luci W | MORTION LINE | r with Littl | an Linuamar |
| | ioi ruei s | INCILLENI PERIN | | au couveillui |
| TO THE STREET | | | | , |

| Control | d delivery irod stop temp. 40°C (104°F) (| Breakaway intermediate sp | | ontrol n | delivery (2 pd stop imp. 40°C (104°F) | | g fuel delivery 6 | Low idle speed 5 | |
|---------|---|---------------------------|------------|-------------|---|---------|-------------------|---------------------|---|
| rev/min | | rev/min | (4) | IV/min | cm ³ /1000 strokes | rev/mii | cm³/1000 strokes | rev/min | travel |
| 1- | 2 | 3 | | | 2 | 6 | 7 | 8 | 9 |
| • | | • | • | | • | • | • | | |
| | . 4 394 092 | • • • | | | | | | | |
| 925 | 157,0-163,0 | 945 | 80 60 | | 145,0-151,0 134,0-140,0 | | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. | 4 394 094 | | | | | | | | |
| 1000 | 180,0-186,0 | 1020 | 80 70 | | 154,0-160,0 142,0-148,0 | | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. | 4 394 096 | | | | | | | | |
| 1050 | 207,0-213,0 | 1070 | 90 80 | | 161,0-175,0 147,0-153,0 | | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. | 4 394 098 | | | | | | | | |
| 900 | 187,0-193,0 | 920 | 70 | 0 | 162,0-168,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| AC-Nr. | 4 394 100 | | | | | | | | |
| 900 | 200,0-206,0 | 920 | 70 |) | 184,0-190,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| AC-Nr. | 4 394 102 | | | | | | | | |
| 900 | 203,0-209,0 | 920 | 70 |) | 209,0-215,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 104 | | | | | | | | • |
| 750 | 185,0-191,0 | 770 | 600 |) | 222,0-228,0 | 100 | 130,0-170,0 | 300 19 | 9.0-25 |
| IC-Nr. | 4 394 106 | | | | | | , | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| 800 | 210,0-218,0 | 820 | 600 |) | 223,0-229,0 | 100 | 130,0-170,0 | 300 10 | 0 0-25 |
| C-Nr. | 4 394 108 | | | | | | 100,0 170,0 | 500 _. 1. | 7,0-25, |
| 050 | 222,0-228,0 | 1070 | 900 | 1 | 202,0-208,0 | 100 | 120 0 170 0 | 200 40 | |
| | 222,0 220,0 | 1070 | 700 | | 207,0-213,0 | | 130,0-170,0 | 300 15 | 7,0-25,0 |
| C-Nr. | 4 394 110 | | | | | | | | |
| 000 | 240,0-246,0 | 1020 | 800 | | 224,0-230,0 | 100 | 130,0-170,0 | 300 19 | 0-25 (|
| | | | 600 | ; | 237,0-243,0 | | ,. | | ,,0 23,0 |
| C-Nr. | 4 394 112 | | | | | | | | |
| 050 | 245,0-251,0 | 1070 | 900 700 | | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| C-Nr. | 4 394 114 | | | | | | | | |
| 000 | 217,0-223,0 | 1020 | 800 | | 197,0-203,0 | 100 | 130,0-170,0 | 300 19 | ,0- 25.n |
| | • | | 600 | 2 | 219,0-225,0 | | - | . • | |
| C-Nr. | 4 394 116 | | | | | | | | |
| 900 | 210,0-216,0 | 920 | 700 | 2 | 212,0-218,0 | 100 | 130,0-170,0 | 300 27 | ,0-33,0 |
| C-Nr. | 4 394 118 | | | | | | | | |
| 050 | 269,0-275,0 | 1070 | 900 | 2 | 81,0-287,0 | 100 | 130,0-170,0 3 | 300 10 | .N-25 A |
| | - | | 700 | | 93,0-299,0 | | ,. ,,,,,,,,, | 13 | , |

| C. | Settings | for Fuel | Injection | Pump wit | h Fitted | Governor |
|----|----------|----------|------------------|-----------------|----------|----------|
|----|----------|----------|------------------|-----------------|----------|----------|

| Full-toad Control-to Test oil te | | Breakaway | 8 ® | Full-load of Control-ro Test oil te | | Starting idle awitchin | luel delivery 6 g point | Low idle speed 5 | |
|--|-------------------------------|-----------|------------|---|----------------------------|------------------------|----------------------------|------------------|--------------|
| rev/min | cm ³ /1000 strokes | rev/min | (4) | rev/min | cm³/1000 strokes | rev/min | cm³/1000 strokes | r dv/m sn | travel mm |
| 1 | 2 | 3 | | 1 | 2 | 6 | 7 | 8 | 9 |
| | | • | , | , | • | • | • | • | • |
| _ | 4 394 120 | 4050 | | | 016 0 050 0 | 400 | 400 0 470 0 | 202 | |
| 1050 | 234,0-240,0 | 1070 | | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 122 | | | | | | | | |
| 050 | 262,0-268,0 | 1070 | | 900 700 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| NC-Nr. | 4 394 124 | | | | | | | | |
| 050 | 241,0-247,0 | 1070 | | 900 700 | 265,0-271,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 126 | | | | | | | | |
| 900 | 232,0-238,0 | 920 | | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 4 394 128 | | | | | | | | |
| 750 | 244,0-250,0 | 770 | | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 130 | | | | | | | 4 | |
| 800 | 239,0-245,0 | 820 | (| 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 132 | | | | | | | | |
| 000 | 212,0-218,0 | 1020 | ; | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 134 | | | | | | | | |
| 900 | 288,0-294,0 | 920 | • | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 394 136 | | | | | | | • | |
| 000 | 255,0-261,0 | 1020 | | 800 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | 600 | 270,0-276,0 | | | | |
| C-Nr. | 4 394 138 | | | | | | | | |
| 050 | 239,0-245,0 | 1070 | | 900 700 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 0 11 - | 4 004 440 | | • | , 00 | 270,0 270,0 | | | | |
| _ | 4 394 140 | 4000 | | 200 | 407 0 000 0 | 400 | 120 0 170 0 | 200 | |
| 000 | 215,0-221,0 | 1020 | | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 142 | | | | | | | | |
| 900 | 222,0-228,0 | 920 | • | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 1 | 19,0-25 |
| C-Nr. | 4 394 144 | | | | | | | | |
| 050 | 257,0-263,0 | 1070 | • | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 3 | 27.0-33 |
| | • | | • | . | , , , , , | • | ,,. | | ,0 00 |
| | 4 394 148 | 1075 | • | 900 | 309,0-315,0 | 100 | 130,0-170,0 | 300 4 |)E ^ |
| 050 | 295,0-303,0 | 10/5 | : | , 00 | 303,0-313,0 | 100 | 130,0-1/0,0 | 300 4 | .5,0 |

] 11

| Full-load of Control-ro Test oil ter | | Breakaway 20 intermediate speed | Control-ro | d stop ng. 40°C (104°F) | Starting Idle switchin | fuel delivery 6 | Low id | le speed 5 |
|--|-------------------------------|---------------------------------|--------------|-------------------------------|------------------------------|------------------|--------------|--------------|
| rev/miñ | cm ³ /1000 strokes | rev/min 49 | 1 . | cm ³ /1000 strokes | rev/min 6 | cm³/1000 strokes | rdv/min e | travel mm |
| | 2 | | | | | | | 1 |
| AC-Nr. | 4 394 150 | | | | | | | |
| 1050 | 268,0-274,0 | 1070 | 900 700 | 274,0-280,0 280,0-286,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 152 | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 .394 154 | | | | | | | |
| 1050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 156 | | | | | | | |
| 1050 | 296,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 158 4 394 157 | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| \C-Nr. | 4 394 160 | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 162 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-Nr. 925 | 4 394 164 176,0-182,0 | 945 | 800 700 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-Nr. | 4 394 166 | | | | | | | |
| 900 | 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 168 | | | | | | | |
| 925 | 237,0-243,0 | | 800 700 | 251,0-257,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| C-Nr. | 4 394 170 | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| C-Nr. | 4 394 176 | | | | | | | |
| | 213,0-219,0 | | 900 700 | 212,0-218,0 240,0-246,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |

| C. : | Settings (| or Fuel | Injection | Pump with | Fitted Governor | |
|------|------------|---------|-----------|-----------|-----------------|--|
|------|------------|---------|-----------|-----------|-----------------|--|

| Full-load d | | Breakaway 20 | Fuel deli | very characteristics (5e) | Starting | ruel delivery 6 | Low idl | e speed 5 |
|-----------------------------|---|--------------------|-------------------|---|------------------|------------------|---------|-------------|
| Control-roi Test oil ten | 1810p np. 40°C (104°F) 2 | intermediate speed | ľ | (S) | idie switchin | g point | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | i 1 | cm³/1000 strokes | rev/min | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| AC-Nr. | 4 394 246 | | | | | | | |
| 1050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | 5 | 130,0-170,0 | 300 | 19,0-25,0 |
| | top part positions stop part pos | | | | | | | |
| AC-Nr. | 4 394 248 | | | | | | | |
| 700 600 | 246,0 263,0 | 720 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 250 | | | | | | | |
| 1050 | 244,5-254,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 257 | | | | | | | |
| 600 | 258,0 | • | | | 100 | 130,0-170,0 | 300 | 27,0 |
| AC-Nr. | 4 394 314 | | | | | | | |
| 1050 | 246,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| 900 700 | 240,0 267,0 | | | | | | | |
| C-Nr. | 4 394 331 | | | | | | | |
| 1050 900 700 | 241,0-247,0 265,0-271,0 268,0-274,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| IC-Nr. | 4 394 332 | | | | | | | |
| 050 900 700 | 268,0-274,0 274,0-280,0 280,0-286,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| IC-Nr. | 4 394 347 . | a, | | | | | | |
| 900 | 269,0-275,0 281,0-287,0 293,0-299,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 348 | | | | | | | |
| | 234,0-240.0 | 1070 | | | 100 | 130,0-170,6 | 300 | 19,0-25,0 |
| | 246,0-252,0 268,0-274,0 | | | | | | | |
| C-Nr. | 4 394 349 | | | | | | | |
| 900 | 208,0-214,0 230,0-236,0 260,0-266,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 350 | | | | | | | |
| 900 | 262,0-268,0 279,0-285,0 289,0-295,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 |

| Full-to | ad delivery | Breakaway (| കി | Fuel dain | rery characteristics (5 | N Starti | ng fuel delivery (6) | Low id | e speed 3 |
|----------------------------|---|-------------|----|------------|-------------------------------|----------|----------------------|----------|---------------|
| Contro | ol-rod stop u temp. 40°C (104°F) (2 | . 1 | - | high ide s | (S) | | hing point | | Control ro |
| tev/ŵ | • | ~1 . | | rev/min | cm ³ /1000 strokes | | in cm³/1000 strokes | reiv/min | tavel I mm |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | • |
| ı AC-Nr | · 4 394 351 | • | • | i | ţ | • | | ı | |
| 1050 900 700 | 253,0-256,0 252,0-258,0 269,0-275,0 | 1070 | | | | 100 | 0 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr | • 4 394 352 | | | | | | | | |
| 1050 900 700 | 262,0-268,0 267,0-273,0 267,0-273,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| lC-Nr | . 4 394 353 | | | | | | | | |
| 050 900 700 | 279,0-285,0 283,0-289,0 293,0-299,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| 050 900 | 296,0-302,0 301,0-307,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| 700 | 309,0-315,0 | | | | | | | | |
| C-Nr. 050 900 700 | . 4 394 356 246,0 240,0 267,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 386 | | | | | | | | |
| 500 | 167,0-175,0 | 620 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| C-Nr. | 4 394 390 | | | | | | | | |
| 900 700 | 259,0-267,0 238,0-246,0 | 925 | | • | | 100 | 130,0-170,0 | 300 19 | 9,0-29, |
| | 4 394 428 | | | | | | | | |
| 00 | 188,0-196,0 180,0-187,0 | 1025 | | | | 100 | 130,0-170,0 3 | 300 25 | 5,0 |
| -Nr. | 4 394 473 | | • | | | | | | |
| 50 50 | 189,0-197,0 185,0-193,0 | 875 | | | | 100 | 130,0-170,0 3 | 25 30 | ,0 |
| -Nr. | 4 394 501 | | | | | | | | |
| 00 00 | 175,0 158,0 | 925 | | | • | 100 | 130,0-170,0 3 | 00 19 | ,0-25,0 |
| | 4 394 521 | | | | | | | | |
| 00 00 | 239,0-247,0 229,0-235,0 | 1025 | | | | 100 | 130,0-170,0 3 | 00 25 | ,0 |
| Nr. | 4 394 527 | | | | | | | | |
| | 161,0 151,0 | 925 | | | | 100 | 130,0-170,0 30 | 00 19. | .n-25.n |

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| Full-load Control- | rod stop | . 1 | Fuel deli high ide | very characteristics (Se | idle | _ | Low id | e speed 5 |
|-----------------------|---|---------------|-----------------------|-------------------------------|----------|--------------------------------|---------------------|---------------------|
| Test oil t | emp. 40°C (104°F) (2 | 'I 💮 | ı | | switchin | | Control root travel | |
| | cm ³ /1000 strokes | revimin 3 | rev/min | cm ³ /1000 strokes | nev/min | cm ³ /1000 strokes | rev/min | |
| <u> </u> | 2 | 1 | - | | | | | |
| AC-Nr | . 4 394 541 | | | | | | | |
| 1050 | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr | . 4 394 550 | | | | | | | |
| 1000 | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 7C-N× | . 4 394 561 | | | | | | | ,. |
| 1050 | 258,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 900 | 256,0 | .000 ,000 | | | .00 | .00,0 170,0 | 900 | 13,0-23 |
| \C-Nr. | . 4 394 564 | | | | | | | |
| 050 | 244,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 | 234,0 | | | | | | | |
| C-Nr. | . 4 394 569 | | | | | | | |
| 000 | 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 590 | | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19.0-25. |
| Beginn | ning of movemen | | 15 bar | at 750 PRM a | | | | |
| oe "0 | 20". | | | | | | | |
| | 4 394 593 | | | | | | | |
| 050 | 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 703 | | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | 900 700 | 267,0-278,0 267,0-278,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| obtaiı Dar pı | stop part posin n mean curve a ressure, gap s | bove. Beginni | quan | tity at 1050 | PRM. 1 | Adjust stop p ,45 bar at 79 | art p 50 PRN | osition 1 and 0, |
| C-Nr. | 4 394 705 4 394 706 | | | | | | | |
| 050 | 258,0 | 1060-1080 | | | 100 | 130,0-170 | 300 | 19,0-25, |
| 900 | 256,0 | | • | | | | - | ,, |
| C-Nr. | 4 394 707 | | | | | | | |
| 050 | 244,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 900 | 234,0 | | | | | | | |
| C-Nr. | 4 394 718 | | | | | | | |
| 955 300 | 198,0-213,0 196,0-210,0 | 965-975 | | | 100 | 130,0-170,0 | 300 2 | 21,0-27, |
| | | | | | | | | |
| | 4 394 719 | | • | | | | | |
| | 166,0-168,0 | 915 | | | 100 | 130,0-170,0 | 300 2 | 21,0-27, |
| C-Nr. 375 500 | | | | | | | | |
| 375 500 | 142,5-146,5 | | | | | | | |
| 375 500 C-Nr. | 142,5-146,5 4 394 733 | 1020 | | | 400 | 420 0 470 0 | | |
| 375 500 | 142,5-146,5 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |

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| C. S | ettings | for | Fuel Injection | Pump with | Fitted | Governor |
|------|---------|-----|----------------|-----------|---------------|----------|
|------|---------|-----|----------------|-----------|---------------|----------|

| Full-toad Control- | od stop | ' | | high ide appeal | | idle | fuel delivery 6 | Low idle speed 5 | | |
|---------------------------|---|--------------------|---|-----------------|-------------------------------|----------|------------------------------|------------------|--------------------------------|--|
| | emp. 40°C (104°F) (2) cm³/1000 strokes | intermediate speed | | rev/min | cm ³ /1000 strokes | switchir | g pestit cm3/1000 strokes | rety/min | Control root travel j mm | |
| 1 TOV/MAN | 2 | revimin 3 | | 4 | 5 | 6 | 7 | 8 | • | |
| 1C-N× | 1 204 740/741 | | | | | | | | | |
| 1020 915 | 4 394 740/741 213,0-226,0 208,0-218,0 | 1030-104 | 0 | | | | | | | |
| | 4 394 744 | | | | | | | | | |
| 1050 900 | 250,0 256,0 | 1060-1080 | 0 | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| lC-Nr. | 4 394 745 | | | | | | | | | |
| 950 750 | 208,0-214,0 196,0-202,0 | 990 | | | | 100 | 130,0-170,0 | 300 | 21,0-27 | |
| IC-Nr. | 4 394 746 | | | | | | | | | |
| 875 600 | 161,0-165,0 140,0-144,0 | 890 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 771 | | | | | | | | | |
| 800 600 | 113,0-119,0 102,0-108,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 773 | | | | | | | | | |
| 800 600 | 125,0-131,0 134,0-140,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| C-Nr. | 4 394 775 | | | | | | | | | |
| 025 900 | 192,0-198,0 180,0-186,0 | 1045 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 | |
| | 4 394 777 | | | | | | | | | |
| 000 800 6 00 | 200,0-206,0 180,0-186,0 189,0-195,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 19,0-25 | |
| C-Nr. | 4 394 779 | | | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 781 | | | | | | | | | |
| 025 900 700 | 230,0-236,0 207,0-213,0 209,0-215,0 | 1040 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 783 | | | | | | | | | |
| 000 300 | 227,0-233,0 197,0-203,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| -Nr. | 4 394 785 | | | • | | | | | | |
| | 235,0-241,0 263,0-269,0 | 1020 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |

| Full-load delivery Control-rod stop | | Breakaway 29 | | Fuel delivery characteristics (5e) high idle assed (5e) | | Starting | fuel delivery 6 | Low idle speed 3 | |
|--|-------------------------------|------------------|-----|---|---------------------------------------|----------|------------------|------------------|-------------|
| Test od te | mp. 40°C (104°F) 2 | intermediate apt | | | (<u>s</u>) | switchin | g point i | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min | (4) | rev/men | cm ³ /1 000 strokes | 1 | cm³/1000 strokes | rev/min | ww |
| 1 | 2 | 3 | | 4 | 5 | 6 | | 8 | 9 |
| C-Nr. | 4 394 787 | | | | | | | | |
| 1000 | 220,0-226,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 | 209,0-215,0 | | | | | | • | | |
| 600 | 227,0-233,0 | | | | | | | | |
| C-Nr. | 4 394 789 | | | | | | | | • |
| 910 | 190,0 | 930 | | | | 100 | 130,0-170,0 | 300 | 25,0 |
| lC-Nr. | 4 394 791 | | | | | | | | |
| 900 | 160,0-166,0 | 920 | • | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 139,0-145,0 | 320 | | | | | | | |
| 1C-Nr. | 4 394 793 | | | | | | | | |
| 600 | 124,0-130,0 | 620 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | 020 | | | | | | | |
| _ | 4 394 795 | 700 | | | | 400 | 120 0 170 0 | 200 | 10 0-25 |
| 700 600 | 127,0-133,0 124,0-130,0 | 720 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | | | | | | |
| _ | 4 394 797 | | | | | 400 | 420 0 470 0 | 200 | 10 0 25 |
| 800 600 | 139,0-145,0 124,0-130,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | • | | | | | | | | |
| | 4 394 799 | | | | | 400 | 130,0-170,0 | 200 | 10 0-25 |
| 925 800 | 157,0-163,0 145,0-151,0 | 945 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 134,0-140,0 | | | | | | | | |
| C-Nr. | 4 394 801 | | | | | | | | |
| | 400 0 405 0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 | 154,0-160,0 | | | | | | • | | |
| 700 | 142,0-148,0 | | | | | | | | |
| C-Nr. | 4 394 803 | | | | | | | | |
| 050 | 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 800 | 161,0-175,0 147,0-153,0 | | | | | | | | |
| | • | | | | | | | | |
| | 4 394 805 | 000 | | | | 400 | 120 0 170 0 | 200 | 27 0-22 |
| 900 700 | 187,0-193,0 162,0-168,0 | 920 | | | | 100 | 130,0-170,0 | 300 | در ,u-33 |
| | • | | | | | | | | |
| | 4 394 807 | 225 | | | | 400 | 400 0 400 0 | | 07 0 00 |
| 900 700 | 200,0-206,0 184,0-190,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| . 55 | | | | | | | | | |
| | | | | | | | | | |
| \C-Nr. 900 | 4 394 809 203,0-209,0 | 920 | | | | 100 | 130,0-170,0 | | 40 0 0- |

| C. Settings for Fuel Injection Pump with Fitted Governor | |
|--|--|
| | |

| Full-load delivery Control-rod #100 | |) \ \(\mathbb{\chi}\) | | Fuel delin | ion ide speed | | Starting fuel delivery 6 | | Low idle speed 5 | |
|--|---|-----------------------|--|--------------|------------------|----------|--|----------|-----------------------|--|
| Test oil te | mp. 40°C (104°F) (2) | intermediale spec | | | cm³/1000 strokes | switchin | g point cm ³ /1000 strokes | reiv/mun | Control rod travel | |
| 1 Len Luriu | cm ³ /1000 strokes | rev/min 3 | | rev/min 4 | 5 | 6 | 7 | 8 | 9 | |
| | | | | | | | | 1 | | |
| AC-Nr. | 4 394 811 | | | | | | | | | |
| 750 600 | 185,0-191,0 222,0-228,0 | 770 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 813 | | | | | | | | | |
| 800 600 | 210,0-218,0 223,0-229,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 815 | | | | | | | | | |
| 1050 900 700 | 222,0-228,0 202,0-208,0 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 817 | • | | | | | | | | |
| 1000 800 600 | 240,0-246,0 224,0-230,0 237,0-243,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 819 | | | | | | | | | |
| 1050 900 700 | 245,0-251,0 224,0-230,0 237,0-243,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 821 | | | | | | | | | |
| 1000 800 600 | 217,0-223,0 197,0-203,0 219,0-225,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 823 | | | | | | | | | |
| 900 700 | 210,0-216,0 212,0-218,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33,0 | |
| AC-Nr. | 4 394 825 | | | | | | | | | |
| | 269,0-275,0 281,0-287,0 293,0-299,0 | 1070 | | | | 100 | 130,0-170.0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 827 | | | | | | | | | |
| 900 | 234,0-240,0 246,0-252,0 268,0-274,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| NC-Nr. | 4 394 829 | | | | | | | | | |
| 1050 900 | 262,0-268,0 279,0-285,0 289,0-295,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| \C-Nr. | 4 394 831 | | | | | | | | | |
| 1050 900 | 241,0-247,0 265,0-271,0 268,0-274,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |

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| C. | Settings | for Fue | Injection | Pump with | Fitted Governor |
|----|-----------------|---------|------------------|------------------|------------------------|

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| Full-load delivery Control-rod stop | | Breakawa | Breakaway 20 | | Fuel delivery characteristics (5e) high idle speed (5b) | | g fuel delivery 6 | Low i | dle speed 3 |
|--|----------------------------|-------------|--------------|---------|---|----------------|-------------------|--------|---|
| | i temp. 40°C (104°F) | entennectat | | | <u> </u> | idle switch | ing point | 1 | Control ro |
| rev/mir | · · | rev/min | (4) | rev/min | cm ³ /1000 strokes | 1 | cm³/1000 strokes | reiv/m | |
| | 2 | - 3 | | - | 5 | 6 | + | В | 9 |
| IC-Nr | . 4 394 833 | | | | | | | | |
| 900 | 232,0-238,0 | 920 | | | | 100 | 120 0-170 0 | 200 | 40 0 05 |
| 700 | 253,0-259,0 | 720 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | . 4 394 835 | | | | | | | | |
| 750 | 244,0-250,0 | 770 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 | 253,0-259,0 | | | | | | | | |
| AC-Nr. | . 4 394 837 | | | | | • | | | |
| 800 600 | 239,0-245,0 248,0-254,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | • | | | | | | | | |
| ic-nr. 1000 | . 4 394 839 212,0-218,0 | 1020 | | | | 400 | 420 0 470 0 | 000 | 40.0.0 |
| 800 | 230,0-236,0 | 1020 | | | • | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-Nr. | . 4 394 841 | | | | | | | | |
| 900 | 288,0-294,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33, |
| 700 | 287,0-293,0 | | | | | | | | |
| C-Nr. | 4 394 843 | | | | | | | | |
| 000 800 | 255,0-261,0 272,0-278,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 600 | 270,0-276,0 | | | | | | | | |
| C-Nr. | 4 394 845 | | | | | | | | |
| 050 | 239,0-245,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25. |
| 900 700 | 233,0-239,0 273,0-279,0 | | | | | | ,,,, | | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| | 4 394 847 | | | | | | | | |
| 000 | 215,0-221,0 | 1020 | | | | 100 | 120 0 470 0 | 220 | 10 0 05 |
| B 00 | 197,0-203,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25,1 |
| 500 | 220,0-226,0 | | | | | | | | |
| | 4 394 849 | | | | | | | | |
| 900 700 | 222,0-228,0 254,0-260,0 | 920 | | | | 100 | 130,0-170,0 | 300 ' | 19,0-25,0 |
| | 4 394 851 | | | | | | | | |
|)50 | 257,0-263,0 | 1070 | | | | 100 | 130,0-170,0 | 300 3 |)7 N_22 4 |
| 750 | 272,0-278,0 | | | | | .00 | 10030-17030 | JUU 2 | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| C-Nr. | 4 394 853 | | | | | | | | |
|)50 | 295,0-303,0 | 1075 | | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| 900 | 309,0-315,0 | | | | | | - | | , |
| -Nr. | 4 394 857 | | | | | | | | |
|)50)00 | 262,0-268,0 267,0-273,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| 00 | 267,0-273,0 | | | | 190 41 | | - | | |

K1

-18-

| Control | delivery rod stop temp. 40°C (104°F) (2 | , I | high idle | very characteristics 5a | Idle | fuel delivery 6 | Low idl | speed 5 |
|--------------------|---|-----------|-------------------|---|------|-------------------------------|-----------|-----------------------------|
| rev/min | | ~1 | 4 rev/min | cm ³ /1000 strokes | ł | cm ³ /1000 strokes | rev/min i | Control rod travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | 7 | 1 - | | | | ! | |
| IC-Nr. | 4 394 861 | | | | | | | |
| 1050 900 700 | 296,0-302,0 301,0-307,0 309,0-315,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 863 | • | | | | | | |
| 900 700 | 253,0-256,0 252,0-258,0 269,0-275,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 865 | | | | | | | |
| 900 700 | 208,0-214,0 230,0-236,0 260,0-266,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| IC-Nr. | 4 394 867 | | | | | | | |
| 900 700 | 181,0-187,0 172,0-178,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 869 | | | | | | | |
| 925 800 700 | 176,0-182,0 162,0-168,0 177,0-183,0 | 945 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 871 | | | | | | | |
| 900 800 | 173,0-179,0 160,0-166,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 873 | | | | | | | |
| 925 800 700 | 237,0-243,0 251,0-257,0 269,0-275,0 | 945 | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,(|
| C-Nr. | 4 394 875 | | | | | | | |
| 700 600 | 218,0-224,0 240,0-246,0 | 720 | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| C-Nr. | 4 394 877 | • | | | | , | | |
| 050 900 700 | 213,0-219,0 212,0-218,0 240,0-246,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| C-Nr. | 4 394 879 | | | | | | | |
| 050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | 100 | 130,0-170,0 | 19,0-2 | 25,0 |

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

| C. | Settings fo | or Fuel Injection | Pump with | Fitted | Governor |
|----|----------------|-------------------|-----------|--------|----------|
| • | ——————— | | | | |

-19-

| Full-toad (Control-ro | od stop | Breakaway 20 | high idle speed (Sh) | | Starting idle switching | ioe centery | Low idle speed | |
|---------------------------|---------------------------------------|---------------------------------|----------------------|-------------------------------|-------------------------|-------------------------------|----------------|---|
| rev/min | mp. 40°C (104°F) (2) cm³/1000 strokes | rev/min 4a | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | Control roc travel mm |
| 1 | 2 | 3 | | 5 | 6 | 7 | 8 | В |
| | 4 004 004 | | | | | | | |
| | 4 394 881 | . 700 | | | 400 | 420 0 470 0 | 200 | 10 0 05 |
| 700 600 | 246,0 263,0 | 720 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 883 | | | | | | | |
| 050 | 244,5-254,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 885 | | | | | | | |
| 600 | 258,0 | | | | 100 | 130,0-170,0 | 300 2 | 27,0 |
| C-Nr. | 4 394 891 | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| C-Nr. | 4 394 893 | | | | | | | |
| 900 700 | 259,0-267,0 238,0-246,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 19,0-29, |
| | 4 394 895 | | | | | | | |
| 000 | 188,0-196,0 | 1025 | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| B 00 | 180,0-187,0 | | | | | | | |
| C-Nr. | 4 394 897 | | | | | | | |
| 350 750 | 189,0-197,0 185,0-193,0 | 875 | | | 100 | 130,0-170,0 | 325 3 | 30,0 |
| | 4 394 899 | | | | | | | |
| 900 | 175,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 9.0-25. |
| 700 | 158,0 | | | | | ,. | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| C-Nr. | 4 394 905 | | | | | | | |
| | 239,0-247,0 229,0-235,0 | 1025 | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| | 4 394 907 | | | | | | | |
| | 161,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 9.0-25. |
| 300 | 151,0 | | | . 750 004 | | | | -,· -, |
| eginni ,90 ba | ing of movemen ar pressure, g | it: 0,40 - 0,4 pap should be | 5 bar "020". | at 750 PRM a | na | | | |
| -Nr. | 4 394 909 | | | | | | | |
| 50 | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| -Nr. | 4 394 911 | | | | | | | |
| 000 | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| -Nr. | 4 394 915 | | | | | | | |
| | | | | | | | | |

JE 3

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load Control-re Test oil te | od stop | intermediate speed | high idle : | (3) | Starting idle awitchir | | Low idl | e speed 5 |
|--|-------------------------------|--------------------|-------------|-------------------------------|------------------------------|------------------|---------|--------------|
| rev/min | cm ³ /1000 strokes | rev/min 40 | rev/mia | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

-20-

AC-Nr. 4 394 917

1050 260,5-271,0 1060-1080

100 130,0-170,0 300 19,0-25,0

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 919

1050 215,5-261;5 1060-1080

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 921

1050 260,5-271,0 1060-1080 900

267,0-278,0 100 130,0-170,0 300 19,0-25,0

267,0-278,0 700

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above. Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 925

1050 244.0 1070

100 130,0-170,0 300 19,0-25,0

900 234,0

AC-Nr. 4 394 997

900 173,0-179,0 800 160,0-166,0

920

100 130,0-170,0 300 19,0-25,0

Festoil-ISO 4113

Test Specifications Fuel Injection Pumps 1 and Governors

WPP 001/4 ALO 16,0 e

PE 6 P 120 A 420 LS 245

ROV 300...1050 PA 202 KR

0 401 846 270 1 - 5 - 3 - 6 - 2 - 4 companyAllis-Chalmers

1 - 5 - 3 - 6 - 2 - 4
Values only apply to test nozzle-and-holder assembly 0 681 443 022 and fuel-injection test tubing 9 681 230 703.

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2.8 + 0.1

mm (from BDC)

| Rotational speed rev/min | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Difference cm ³ / 100 strokes 4 | Control rod travel mm | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|--------------------------|----------------------------------|--|---|-----------------------------|--|--|
| 1000 | 12 | 26,4 - 27,1 | | | 1,0 | |
| 600 | 6 12 | 8,6 - 9,8 26,3 - 28,1 33,8 - 36,2 | | | | |
| 200 | 15 6 | 4,2 - 5,2 | | | | |

Adjust the fuel delivery from each outlet according to the values in

B. Governor Settings

| 1 | Upper rated s | | Control rod (| $\overline{}$ | Intermediate | rated sp | sed Control rod | Lower rated | speed | Control rod | Sliding s | leeve travel |
|---|-----------------------|--------------------|---------------|---------------|-----------------------|--------------|--------------------|--|--------------------------|------------------------------------|-----------|--------------|
| | deflection of control | Control rod travel | travel | 9 (3) | deflection of control | rev/min 5 | travel mm 4 | deflection of control lever 7 | rev/min 8 | travel mm 3 | rev/min | mm 11 |
| | 66° | | | 0 | | | | 10° | 250 350 450 550 | 6,4-8,0 3,0-5,2 1,3-2,8 0 | | |

Torque control travel a =

mm

C. Settings for Fuel Injection Pump with Fitted Governor

| Į | d stop np. 40°C (104°F) 2 | Rotational-speed 2b limitation intermediate speed | high idle s | poeed (50) | idle switchin | ng point | travel | Control rod travel |
|---------|------------------------------|---|-------------|-------------------------------|------------------|-------------------------------|---------|--------------------|
| rev/min | cm³/1000 strokes | rev/min 😅 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 88 | 9 |
| | | | | | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

| _ | | | | |
|--------|----------|-------------------|--------------|------------------------|
| | Cattimen | for Cual Inicatio | | Cition Covers |
| - K.a. | Seitings | ioi puel millicuo | i Punio With | i mitea Governor |
| • | | | | Fitted Governor |

| | d delivery Frod stop | Breakaway (| Control | d delivery 2 | Starting | fuel delivery 6 | Low id | ile speed 5 | |
|----------------|--------------------------|--------------------|------------|---|---------------------|-----------------|-------------|-----------------------|---|
| | temp. 40°C (104°F) (2) | intermerhate speed | Test oil | lemp. 40°C (104°F) cm³/1000 strokes | switchin rev/min | | rev/mi | Control rod travel | • |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | • | |
| ı | 1 | 1 | • | 1 | i 1 | | i | 1 1 | |
| AC-Nr. 1025 | 91,0-93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |) |
| AC-Nr. | 4 320 793 | | | | | | | | |
| 1000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |) |
| AC-Nr. | 4 320 815 | | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |) |
| AC-Nr. | 4 320 816 | | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 | l |
| AC-Nr. | 4 320 817 | | | | | | | | |
| 1100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 | |
| AC-Nr. | 4 320 829 | | | • | | | | | |
| 1100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19,0 | |
| AC-Nr. | 4 320 933 | | | | | | | | |
| 900 | 102,0-110,0 | 1040 | 800 | 107,0-116,0 | 100 | 90,0-130,0 | 300 | 25,0 | |
| AC-Nr. | 4 320 939 | | | | | | | | |
| 900 | 98,5 <u>+</u> 3 | 1040 | 700 | 107,5 <u>+</u> 4 | 100 | 90,0-130,0 | 300 | 25,0 | |
| AC-Nr. | 4 320 940 | | | | | | | | |
| 900 | 78,0- 86,0 | 1040 | 700 | 100,0-109,0 | 100 | 90,0-130,0 | 300 | 25,0 | |
| | 4 320 941 | | | | | | | | |
| 1025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 | |
| AC-Nr. 1000 | 4 320 942 122,0-124,0 | 1020 | 700 | 126 0 120 0 | 400 | 00 0 100 0 | 000 | | |
| | | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 | |
| 900 | 4 320 980 108,0-116,0 | 1120 | 800 | - | 100 | 90,0-130,0 | 37 5 | 0.0-10.0 | |
| | 4 320 981 | | | | 100 | 20,0 130,0 | 3/3 | 3,0-13,0 | |
| 900 | 111,0-119,0 | 1020 | 800 | 112,0-118,0 | 100 | 90,0-130,0 | 300 | 25,0 | |
| | 4 321 016 | | | | | | | 23,0 | |
| 750 | 95,0-101,0 | 1020 | 750 | 95,0-101,0 | 100 | 90,0-130,0 | 300 | 25,0 | |
| AC-Nr. | 4 321 064 | | | | | - | | . • • | |
| 1000 | 112,0 | 1030 | 800 | 112,5 | 100 | 90,0-130,0 | 300 | 25,0 | |
| | | | | | | | | | |

| Full-load (Control-re | od stoo | i i | 20 Full-load Control- | od stop | Starting Idle | fuel delivery 6 | Low id! | e speed 5 |
|---------------------------|--|-------------------------------|--------------------------|-------------------------------|---------------|-----------------|---------|-----------------------|
| • | mp. 40°C (104°F) (2) cm³/1000 strokes | intermediate apect rev/min | rev/min | cm ³ /1000 strokes | rev/min | | rev/min | Control roc travel |
| rev/min 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | 9 |
| | | | ł | 1 | | | 5 | 1 |
| C-Nr. | 4 359 816 | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 826 | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 828 | | | | | | | |
| 100 | 139,0-143,0 | 1120 | 800 600 | 149,0-154,0 153,0-161,0 | 100 | 90,0-130,0 | 375 | 9,0-19 |
| C-Nr. | 4 359 830 | | | | | | | |
| 025 | 91,0- 93,0 | 1040 | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 832 | | | • | | | | |
| 000 | 122,0-124,0 | 1020 | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr | 4 392 693 | | | | | | | |
| 050 | 205,0-215,0 | 1065-80 | 900 | 167,0-177,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | • | | | , | | | | • |
| 900 | 4 392 695 149,0-155,0 | 920 | _ | - | _ | • | 300 | 19,0-25 |
| | | 520 | | | | | 000 | 13,0 60 |
| | 4 392 697 | 770 | 600 | 202 2 202 2 | 400 | 400 0 470 0 | | 40.0.05 |
| 750 | 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 699 | | | | | | | |
| 800 | 210,0-218,0 | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 701 | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 703 | | | | | | | |
| 050 | 220,0-230,0 | 1060-70 | 900 | 200,0-210,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 205,0-215,0 | | | | |
| C-Nr. | 4 392 707 | | | | | | | |
| 050 | 243,0-253,0 | 1060-80 | 900 700 | 222,0-232,0 235,0-245,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 709 | | | | | | | |
| 000 | 217,0-223,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 600 | 219,0-225,0 | | | | |
| C-Nr. | 4 392 711 | | | | • | | | |
| 600 | 231,0-237,0 | 620 | - | • | - | - | 300 | 19,0-25 |

| C. Settings for | Fuel Injection Pump with | h Fitted Governor |
|-----------------|--------------------------|-------------------|
|-----------------|--------------------------|-------------------|

| Full-load Control-r | od stop | Breakaway | — c | ult-load ontroi | od stop | Idle | fuel delivery 6 | Low id | speed 5 |
|------------------------|--|-----------|------|----------------------|-------------------------------|------|------------------------------|---------|-------------|
| rev/min | kmp. 40°C (104°F) (2 cm²/1000 strokes | rev/min | | est oll tr ev/min | cm ² /1000 strokes | 1 | ng point cm²/1000 strokes | rev/min | Control roo |
| 1 | 2 | 3 | | E 4////061 | 2 | 6 | 7 | 8 | 9 |
| | | 1 | 1 | | | 1 | | | 1 |
| C-Nr. | 4 392 715 | | | | | | | | |
| 050 | 187,0-193,0 | 1070 | | 00 00 | 174,0-180,0 175,0-181,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 717 | | | | | | | | |
| 050 | 224,0-230,0 | 1070 | 8 | 00 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 719 | | | | | | | | |
| 050 | 200,0-206,0 | 1070 | | 00 00 | 190,0-196,0 214,0-220,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 721 | | | | | | | | |
| 050 | 242,0-248,0 | 1070 | | 00 00 | 220,0-226,0 230,0-236,0 | | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 392 723 | | | | | | | | |
| 750 | 244,0-250,0 | 770 | 7 | 00 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 725 | | | | | | | | |
| 800 | 239,0-245,0 | 820 | 6 | 00 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. 900 | 4 392 727 232,0-238,0 | 920 | 7 | 00 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 729 | | | | | | | | |
| 000 | | 1020 | 8 | 00 | 230,0-236,0 | 100 | 130,0-170,0 | 300. | 19,0-25 |
| C-Nr. | 4 392 731 | | | | | | | | |
| 900 | 288,0-294,0 | 920 | 7 | 00 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 392 735 | | | • | | | | | |
| 050 | 239,0-245,0 | 1070 | | 00 00 | 233,0-239,0 273,0-279,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 737 | | | | | | | | |
| 000 | 215,0-221,0 | 1020 | | 00 00 | 197,0-203,0 220,0-226,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 739 | | | | | | | | |
| 050 | 207,0-213,0 | 1050 | | 00 00 | 195,0-201,0 225,0-231,0 | | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 741 | | | | | | | | |
| 050 | 213,0-219,0 | 1070 | | 00 00 | 202,0-208,0 230,0-236,0 | | 130,0-170,0 | - | - |
| C-Nr. | 4 392 743 | | | | | | | | |
| 050 | 220,0-226,0 | 1070 | | 00 00 | 210,0-216,0 243,0-249,0 | | 130,0-170,0 | 300 | 19,0-25 |

K8

| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | • • • • • |
|---|------------|--------------------|--|--------------------------|
| | | | المتعادل والمتعادل والمتعادل والمتعادل والمتعادل والمتعادل والمتعادل والمتعادل والمتعادل والمتعادل والمتعادل والمتعادل | |
| | | | | Low idle speed |
| deliment | Break susu | Eult Jood dellines | Charting fried delivery | (E) lean raic speed 4 li |

| Full-toad Control-re | | Breakaway | | nd delivery Frod stoo | Starting Idle | fuel delivery 6 | Low 1d1 | e speed 5 |
|-------------------------|-------------------------------|------------------|-------------|----------------------------|---------------|-----------------|----------|-------------|
| | imp. 40°C (104°F) 2 | intermodate spec | Test of | temp. 40°C (104°F) | awitchir | g point | | Control rod |
| rev/min | cm ³ /1000 strokes | revimin | rev/mir | | rev/min | | retv/min | (A) |
| 1 | 2 | 3 | | 2 | 6 | 7 | 8 | - |
| | | | | | | | | |
| NC-Nr. 1050 | 4 392 747 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-Nr. | 4 392 749 | | | | | | | |
| 050 | 230,0-234,0 | 1070 | - | • | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | • | | | | | , | | |
| | 4 392 750 | 1070 | _ | _ | 100 | 130,0-170,0 | 300 - | 10 0-25 |
| 050 | 230,0-234,0 | 1070 | - | _ | 100 | 130,0-170,0 | 300 | 13,0-23, |
| | 4 392 768 | | | | | 400 5 455 5 | 000 | 40 2 22 |
| 800 | 123,0-133,0 | 820 | 600 | 132,0-142,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 392 775/776 | | | | | | | |
| 875 | 162,0-164,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 777 | | | | | | | |
| 950 | 205,0-207,0 | 970 | 700 | 195,0-199,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | - | | | | | | | |
| | 4 392 778 | 000 | 750 | 196.0-202.0 | 100 | 130,0-170,0 | 300 - | 21 0_27 |
| 950 | 208,0-214,0 | 990 | /50 | 190,0-202,0 | . 100 | 130,0-170,0 | 300 / | 21,0-27 |
| | 3 392 779 | | | | | | | |
| 025 | 190,0-200,0 | 1030-40 | 1000 900 | 191,0-201,0 178,0-188,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 200 | , | | | | |
| | 4 392 781 | 4050 60 | 000 | 005 0 045 0 | 400 | 420 0 470 0 | 200 | 40 0 05 |
| 025 | 228,0-238,0 | 1050-60 | 900 700 | 205,0-215,0 207,0-217,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| . | 4 200 052 | | | | | | | |
| | 4 392 953 | 055-65 | | _ | 100 | 130,0-170,0 | 200 | 10 025 |
| 940 | 185,0-195,0 | 955-65 | • | - | 100 | 130,0-170,0 | 200 | 13,0-25, |
| C-Nr. | 4 393 095 | | | | | | | |
| 050 | 211,0-221,0 | 1060-80 | 900 700 | 210,0-220,0 238,0-248,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 230,U-240,U | | | | |
| C-Nr. | 4 393 307 | | - | | | | | _ |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 393 431 | | | | | | | |
| 050 | 208,0-214,0 | 1070 | 900 | 230,0-235,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 260,0-266,0 | | | | |
| C-Nr. | 4 393 821 | | | | | | | |
| 050 | 242,0-248,0 | 1070 | 900 | 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | 700 | 230,0-236,0 | | | | |

| | ettings for Ft | 7 | ~ | ad delivery (2) | | fuel delivery (6) | Low id | Low idle speed 5) | | |
|---------|------------------------------------|---------------|----------------|-----------------------------------|---------|---|---------|--|--|--|
| Control | rod stop temp. 40°C (104°F) (2) | | Contro | Hrod stop I temp. 40°C (104°F) | (Idle | ng point | | Control rod | | |
| rev/min | | | lav/mi | 1 | rev/min | 1 | rev/min | ł t | | |
| 1 | _ 2 | 3 | - ' | - 2 | 16 | 7 | 8 | | | |
| AC-No | . 4 393 823 | | | | | | | | | |
| 1050 | . 4 353 623 187,0-193,0 | 1070 | 900 | 174,0-180,0 | 100 | 120:01700 | 200 | 10 0 05 | | |
| 1030 | 107,0-193,0 | 1070 | 700 | 175,0-181,0 | | 130,0-170,0 | 300 | 19,0-25, | | |
| AC-Nr. | . 4 393 825 | | | | | | | | | |
| 1050 | 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19.0-25. | | |
| AC-Nr | . 4 393 827 | | | | | ,. | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | |
| 1050 | 200,0-206,0 | 1070 | 900 | 190,0-196,0 | 100 | 130,0-170,0 | 300 | 10 0-25 | | |
| | 200,0 | | 700 | 214,0-220,0 | | 100,0 170,0 | 300 | 13,0-20, | | |
| AC-Nr. | 4 393 829 | | | | | | | | | |
| 1050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25, | | |
| AC-Nr. | 4 393 831 | | | | | | | | | |
| 1050 | 213,0-219,0 | 1070 | 900 | 202,0-208,0 | 100 | 130,0-170,0 | _ | - | | |
| | | | 700 | 230,0-236,0 | | • | | | | |
| AC-Nr. | 4 393 833 | | | | | | | | | |
| 1050 | 264,0 | 1060-1080 | 900 | 280,5 | 100 | 130,0-170,0 | 300 1 | 19,0-25,0 | | |
| AC-Nr. | 4 393 835 | | | | | | | | | |
| 1050 | 220,0-226,0 | 1070 | 900 | 210,0-216,0 | 100 | 130,0-170,0 | 300 1 | 9,0,25,0 | | |
| | | | 700 | 243,0-249,0 | | | | | | |
| - | 4 393 837 | | | | | | | | | |
| 1050 | 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | | |
| AC No. | 4 202 000 | | ,00 | 247,0-255,0 | | | | | | |
| 950 | 4 393 890 | 000 | 750 | 406 0 000 0 | 400 | 400 0 450 0 | | | | |
| | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 1,0-27,0 · | | |
| | 4 393 891 | 065 075 | | | | | | | | |
| 955 | 208,0 | 965-975 | 895 | 203,0 | - | | | - ' | | |
| | 4 393 961 | | | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | | |
| AC-Nr. | 4 394 001 | | | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 | | |
| AC-Nr. | 4 394 017 | | | | | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 1,0-27.0 | | |
| AC-Nr. | 4 394 020 | | | | | - · · · · · · · · · · · · · · · · · · · | | J = -, 30 | | |
| 700 | 249,0-257,0 | 725 | 600 | 258,0-264,0 | 100 | 130,0-170,0 | 300 1º | 0 N_20 0 | | |
| | | - | | ,,0 | .00 | .00,0-1/0,0 | JUU 11 | 2,0-23,0 | | |

K10

| C. | Settings | for Fuel | Injection | Pump with | Fitted (| Sovernor |
|----|----------|----------|-----------|------------------|----------|------------------|
| V. | 20 cm 30 | 101 1-06 | | Lamb am | TILLOU I | 301611101 |

| Control- | delivery rod stop | Breakaway | Control-rod stop | | @ | ملاما | fuel delivery 6 | Low in | ile speed 3 | |
|----------|---|------------------|------------------|--------------|---------------------------------|--------------|-----------------|------------------------------|-------------|-----------------------|
| (ev/min | leinp. 40°C (104°F) (2) cm³/1000 strokes | intermediate ape | • | revimin | imp. 40°C (104° cm³/1000 str | | | ng point cm³/1000 strokes | | Control ro- travel |
| 1 | 2 | 3 | | 1 | 2 | DAGS | 6 | 7 | rév/mi 8 | 9 |
| | | | | | 1 | | | | 1 | |
| AC-Nr. | 4 394 062 | | | | | | | | | |
| 800 | 113,0-119,0 | 820 | (| 6 0 0 | 102,0-10 | 0,8 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 064 | | | | | | | | | |
| 875 | 161,0-165,0 | 890 | 6 | 500 | 140,0-14 | 4,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| AC-Nr. | 4 394 066 | | | | | | | • | | ,. |
| 800 | 125,0-131,0 | 820 | ŧ | 500 | 134,0-14 | 0.0 | 100 | 130,0-170-0 | 300 | 19 0-25 |
| AC-Nr. | 4 394 068 | | | | | - • - | | ,. | | 13,0 23 |
| 1025 | 192,0-198,0 | 1045 | 9 | 900 | 180,0-18 | 6.0 | 100 | 130,0-170,0 | 300 | 10 0-25 |
| lC-Nr | 4 394 070 | | | | ,. | ,0 | | 100,0 170,0 | 500 | 19,0-25 |
| 000 | 200,0-206,0 | 1020 | 8 | 800 | 180,0-18 | 6.0 | 100 | 130,0-170,0 | 300 | 10 0-25 |
| | | | | 00 | 189,0-19 | | 100 | 150,0-170,0 | 300 | 13,0-25 |
| C-Nr. | 4 394 072 | | | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | | | - | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 074 | | | | | | | | | |
| 025 | 230,0-236,0 | 1040 | | 00 | 207,0-21 | | 100 | 130,0-170,0 | 300 | 19.0-25. |
| | | | 7 | 00 | 209,0-21 | 5,0 | | | | |
| | 4 394 076 | | | | | | | | | |
| 000 | 227,0-233,0 | 1020 | 8 | 00 | 197,0-20 | 3,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 4 394 078 | | | | | | | · | • | |
| 000 | 235,0-241,0 | 1020 | 7 | 00 | 263,0-269 | 9,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 080 | | | | | | | | | |
| 000 | 220,0-226,0 | 1020 | 80 60 | 00 | 209,0-215 | | 100 | 130,0-170,0 | 300 | 19,0,25, |
| > A1 | 4:204.200 | | Οl | JU | 227,0-233 |) , U | | | | |
| | 4 394 082 190,0 | 020 | | | | | | | | |
| | - | 930 | • | | - | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| | 4 394 084 | 000 | | 10 | 400 5 55 | | | | | |
| | 160,0-166,0 | 920 | 70 | IU | 139,0-145 | ,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 086 | 600 | | | | | | | | |
| | 124,0-130,0 | 620 | - | | - | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| | 4 394 088 | | | | | | | | | |
| 00 | 127,0-133,0 | 720 | 60 | 0 | 124,0-130 | ,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 394 090 | | | | | | | | | |
| 00 1 | 139,0-145,0 | 820 | 60 | 0 1 | 124,0-130 | ,0 | 100 | 130,0-170,0 3 | 300 1 | 9,0-25,0 |

| C. | Settings | for Fuel | in | jection Pu | mp with | Fitted | Governor |
|----|-----------------|----------|----|-------------------|----------------|---------------|----------|

| Control | delivery rod stop temp. 40°C (104°F) (2 | Breakaway intermediate spe | Contro | ad delivery H-rod stop I temp. 40°C (104°F) | Idle | ng point | Low idle speed 5 Control rod travel | | |
|----------|---|-------------------------------|------------|---|---------|-------------------------------|--------------------------------------|-------------------|--|
| LGA/LINU | cm³/1000 strokes | rev/min | rev/mi | n cm³/1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | | |
| 1 | 2 | 3 | | 2 | 6 | 7 | 8 | - | |
| | • | • | · | • | | | | | |
| | 4 394 092 | | | | | | | | |
| 925 | 157,0-163,0 | 945 | 800 600 | 145,0-151,0 134,0-140,0 | | 130,0-170,0 | 300 1 | 19,0-25, | |
| AC-Nr. | 4 394 094 | | | | | | | | |
| 1000 - | 180,0-186,0 | 1020 | 800 700 | 154,0-160,0 142,0-148,0 | | 130,0-170,0 | 300 1 | 9,0-25 | |
| AC-Nr. | 4 394 096 | | | | | | | | |
| 1050 | 207,0-213,0 | 1070 | 900 800 | 161,0-175,0 147,0-153,0 | | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 098 | | | | | | | | |
| 900 | 187,0-193,0 | 920 | 700 | 162,0-168,0 | 100 | 130,0-170,0 | 300 2 | 2 7, 0-33, | |
| IC-Nr. | 4 394 100 | | | | | | | | |
| 900 | 200,0-206,0 | 920 | 700 | 184,0-190,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33 | |
| C-Nr | 4 394 102 | | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 1 | 9 0-25 | |
| | • | 3.1 0 | , , , | 200,0 2.0,0 | | 100,0 170,0 | 300 1 | J,0-2J | |
| 750 | 4 394 104 185,0-191,0 | 770 | 600 | 222 0 220 0 | 100 | 120 0 170 0 | 200 4 | 0 0 05 | |
| | , | //0 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25 | |
| | 4 394 106 | | | | | | | | |
| 800 | 210,0-218,0 | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 108 | | | | | | | | |
| 050 | 222,0-228,0 | 1070 | 900 700 | 202,0-208,0 207,0-213,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| . | | | 700 | 207,0-213,0 | | | | | |
| | 4 394 110 | 1000 | 000 | | | | | | |
| 000 | 240,0-246,0 | 1020 | 800 600 | 224,0-230,0 237,0-243,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C_815 | 4 394 112 | | | • | | | | | |
| 050 | 245,0-251,0 | 1070 | 900 | 224,0-230,0 | 100 | 120 0-170 0 | 200 4 | 0 0 0 | |
| 030 | 243,0°231,0 | 1070 | 700 | 237,0-243,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 114 | | | | | | | | |
| _ | 217,0-223,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25. | |
| | | | 600 | 219,0-225,0 | | | | -,, | |
| C-Nr. | 4 394 116 | | | | | | | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, | |
| C-Nr. | 4 394 118 | | | | | | | | |
| | 269,0-275,0 | 1070 | 900 | 281,0-287,0 | 100 | 130,0-170,0 | 300 1¢ | n.∩-25 | |
| | | | 700 | 293,0-299,0 | | ,0 ,70,0 | | ,,u-20, | |

K12

| C. | Settings | for F | uel Injec | tion Pump | with | Fitted | Governor |
|----|-----------------|-------|-----------|-----------|------|---------------|----------|

-9-

| Full-load | tungs for Fi | Breakaway | (2b) Full-load | | Starting | fuel delivery (6) | Low id? | e speed 5) |
|----------------|-------------------------------|-----------|----------------|-------------------------------|----------|-------------------|------------------|--------------|
| Control | | | Control- | rod stop emp. 40°C (104°F) | switchin | | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min | rev/min | cm³/1000 strokes | 1 | cm³/1000 strukes | rév/min | mm . |
| 1 | 2 | 3 | ¹ | 2 | 6 | 7 | 8 | • |
| AC-Nr. | 4 394 120 | | | | | | | |
| 1050 | 234,0-240,0 | 1070 | 900 700 | 246,0-252,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 122 | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 279,0-285,0 289,0-295,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 124 | | | | | | | |
| 1050 | 241,0-247,0 | 1070 | 900 700 | 265,0-271,0 268,0-274,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 126 | | | | | | | |
| 900 | 232,0-238,0 | 920 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 128 | | | | | | | |
| 750 | 244,0-250,0 | 770 | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr | 4 394 130 | | | | | | | |
| 800 | 239,0-245,0 | 820 | 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19.0-25. |
| | | 0 | | 2.0,0 20.,0 | ,,,, | | | , |
| AC-Nr. 1000 | 4 394 132 212,0-218,0 | 1020 | 800 | 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19 0-25 |
| | | 1020 | 500 | 230,0 230,0 | 100 | 100,0 170,0 | 500 | 15,0 25, |
| | 4 394 134 | 000 | 700 | 207 0 202 0 | 400 | 120 0 170 0 | 200 | 27 0 22 |
| 900 | 288,0-294,0 | 920 | 700 | 287,0-293,0 | 100 | 130,0-170,0 | . 300 i | 27,0-33, |
| AC-Nr. | 4 394 136 | | | | | | | |
| 1000 | 255,0-261,0 | 1020 | 800 600 | 272,0-278,0 270,0-276,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | | | 000 | -,0,0 -,0,0 | | | | |
| | 4 394 138 | 4070 | 000 | 222 0 020 0 | 400 | 120 0 470 0 | 200 | •0 0 00 |
| 1050 | 239,0-245,0 | 1070 | 900 700 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| ac-N× | 4 394 140 | | | | | | | |
| 1000 | 215,0-221,0 | 1020 | 800 | 197,0-203,0 | 100 | 130,0-170,0 | 300 | 19,0-25. |
| | ,0 56,30 | . 424 | 600 | 220,0-226,0 | | | ~ - • | , - 10 - |
| AC-Nr. | 4 394 142 | | | | | | | |
| 900 | 222,0-228,0 | 920 | 700 | 254,0-260,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 7C-N~ | 4 394 144 | | | | | | | |
| 1050 | 257,0-263,0 | 1070 | 750 | 272,0-278,0 | 100 | 130,0-170,0 | 300 | 27.0-33 |
| | | 10/0 | , , , | -/-,0 -/-,0 | . 50 | | | -,,0 00; |
| | 4 394 148 | 4 | ** | 466 4 617 1 | 465 | 400 0 470 0 | 000 | 0 = 4 |
| 1050 | 295,0-303,0 | 1075 | 900 | 309,0-315,0 | 100 | 130,0-170,0 | 300 | 25,0 |
| | | | | | | | | |

| | ittiligs for Ft | | | | | vemor | 10-141 | e speed 5 |
|--|--------------------------|--------------|--------------|---|-------------------------|-------------------|---------|--------------|
| Full-load Control-re Test oil te | | Breakaway 22 | Control-re | lelivery (2) Id stop mp. 40°C (104°F) | Starting idle switching | Ruel delivery (6) | | Control rod |
| ten/umu | cm³/1000 strokes | rev/min 4 | . 1 . | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | 9 |
| AC-Nr. | 4 394 150 | • | • | • | ' | ' | | • |
| 1050 | 268,0-274,0 | 1070 | 900 | 274,0-280,0 | 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| | , | | 700 | 280,0-286,0 | _ | | | |
| AC-Nr. | 4 394 152 | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 | 267,0-273,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | 700 | 267,0-273,0 | | | | |
| AC-Nr. | 4 394 154 | | | | | | | |
| 1050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | 4 204 456 | | , 00 | 250,0 255,0 | | | | |
| AC-Nr. 1050 | 4 394 156 296,0-302,0 | 1070 | 900 | 301,0-307,0 | 100 | 130,0-170,0 | 200 | 10 0 25 (|
| 1020 | 290,0-302,0 | 1070 | 700 | 309,0-315,0 | 100 | 130,0-170,0 | 300 | 13,0-25,0 |
| AC-Nr. | 4 394 158 | | | | | | | |
| 15 | 4 394 157 | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | 700 | 203,0 273,0 | | | | |
| | 4 394 160 | 4070 | 000 | 220 0 225 0 | 400 | 420 0 470 0 | 200 | 40 0 05 0 |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 394 162 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| IC-Nr. | 4 394 164 | | | • | | | | |
| 925 | 176,0-182,0 | 945 | 800 | 162,0-168,0 | 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| | | | 700 | 177,0-183,0 | | ,. | | ,,. |
| \C-Nr. | 4 394 166 | | | | | | | |
| 900 | 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| C-Nr. | 4 394 168 | | | | | | | |
| 925 | 237,0-243,0 | 945 | 800 | 251,0-257,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| | | | 700 | 269,0-275,0 | | · | | |
| IC-Nr. | 4 394 170 | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 27,0-33,0 |
| IC-Nr. | 4 394 176 | | | | | | | |
| 050 | 213,0-219,0 | 1070 | 900 | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | 700 | 240,0-246,0 | | | | |

-10-

| Nivery | Breakaway | (20) Fuel delivery cl | practaciatics (Sa Sta | rting first delivery | C Low 1 | dle speed 5) | |
|----------------------|--------------|----------------------------|-----------------------|----------------------|---------|--------------|--|
| m v v · / | I O' CONDUCT | (60) [1 00 00 10 10] O | | | (~ /) | ~, | |

| Full-load of Control-ro Test oil ter | d stoo | intermediate speed | high ide : | (a) | Starting Idle switchir | • 0 | Low idle | Control rod |
|--|-------------------------------|--------------------|------------|-------------------------------|------------------------------|-------------------------------|----------|-------------|
| rev/min | cm ³ /1000 strokes | rev/min 49 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | ł | | | | 1 1 | |

AC-Nr. 4 394 246

1050 211,0-220,0 975 1055-1075 237,5-247,0 100 130,0-170,0 300 19,0-25,0 700 258,5-269,5 600 255,5-266,0

Tilt stop part position to obtain quantity at 1050 PRM.

C. Settings for Fuel Injection Pump with Fitted Governor

Adjust stop part position to obtain mean curve above. AC-N= 4 304 248

| VC-III | • | 4 | 334 | 240 |
|--------|---|----|------|-----|
| 700 | | 24 | 16,0 | |

| 700 246,0 720 100 600 263,0 | 130,0-170,0 300 | 19,0-25,0 |
|--------------------------------|-----------------|-----------|
|--------------------------------|-----------------|-----------|

AC-Nr. 4 394 250

| 1050 | 244,5-254,5 | 1060-1080 | 100 | 130.0-170.0 | 300 19,0-25,0 |
|------|-------------|-----------|-----|-------------|---------------|
| 1030 | <u> </u> | 1000 1000 | 100 | 130,0-170,0 | 300 13,0-23,0 |

AC-Nr. 4 394 257

| 600 | 258,0 | · | 100 | 130,0-170,0 300 27,0 |
|-----|-------|---|-----|----------------------|
|-----|-------|---|-----|----------------------|

AC-Nr. 4 394 314

| 1050 | 246,0 | 1070 | 100 | 130,0-170,0 300 | 19,0-25,0 |
|------|-------|------|-----|-----------------|-----------|
| 900 | 240,0 | | | | |
| 700 | 267,0 | | | | |

AC-Nr. 4 394 331

| 1050 | 241,0-247,0 | 1070 | 100 | 130,0-170,0 300 | 19.0-25.0 |
|------|-------------|------|-----|-----------------|---|
| 900 | 265,0-271,0 | | | - | • |

268,0-274,0 700

| AC-Nr. | 4 394 332 | | | | |
|--------|-------------|------|----|---|---------------------------|
| 1050 | 268,0-274,0 | 1070 | 10 | 0 | 130,0-170,0 300 19,0-25,0 |

900 274,0-280,0 700 280,0-286,0

AC-Nr. 4 394 347 1050 269,0-275,0 1070 100 130,0-170,0 300 19,0-25,0

900 281,0-287,0

700 293,0-299,0

AC-Nr. 4 394 348

| 1050 | 234,0-240,0 | 1070 | 100 | 130,0-170,0 300 | 19.0-25.0 |
|------|-------------|------|-----|-----------------|-----------|
| 900 | 246,0-252,0 | | | | ,,. |
| 700 | 260 0 274 0 | | | | |

268,0-274,0

AC-Nr. 4 394 349

| 1050 900 700 | 208,0-214,0 230,0-236,0 | 1070 | 100 | 130,0-170,0 300 | 19,0-25,0 |
|--------------------|----------------------------|------|-----|-----------------|-----------|
| 700 | 260,0-266,0 | | | | |

AC-Nr. 4 394 350

| 900 279 0-285 0 | | | 1070 | | 100 | 130,0-170,0 300 19,0-25, | 0 |
|-----------------|--|--|------|--|-----|--------------------------|---|
|-----------------|--|--|------|--|-----|--------------------------|---|

700 289,0-295,0

Testoil-ISO 4113

K15

| C. | Settings f | for Fuel Injection | Pump with Fitted | Governor |
|----|------------|--------------------|------------------|----------|
|----|------------|--------------------|------------------|----------|

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| Full-load Control- | I delivery | Breakaway | · (26) | Fuel delin | very characteristics (Se | fuel delivery 6 | M delivery 6 Low idle spec | | |
|-----------------------|-------------------------------|------------------|--------|------------|-------------------------------|-----------------|-------------------------------|---------|-------------|
| | emp. 40°C (104°F) 2 | intermediate spe | _ | | (m. (8) | idle switchi | ng point 1 | İ | Control rod |
| Lev/únu | cm ³ /1000 strokes | rev/min | • | rev/min | cm ³ /1000 strokes | | cm ³ /1000 strokes | rev/min | mm |
| | 2 | 3 | | - | - | 6 | 1 ′ | 8 | 9 |
| AC-Nr. | 4 394 351 | | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 900 700 | 252,0-258,0 269,0-275,0 | | | | | | | | |
| | | | | | | | | | |
| | 4 394 352 | 4000 | | | | | | | |
| 1050 900 | 262,0-268,0 267,0-273,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 | 267,0-273,0 | | | | | | | | |
| IC-Nr. | 4 394 353 | | | | | | | | |
| 050 | 279,0-285,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25. |
| 900 700 | 283,0-289,0 293,0-299,0 | | | | | | | | .5,0 20, |
| | · | | | | | | | | |
| | 4 394 354 | | | | • | | | | |
| 050 900 | 296,0-302,0 301,0-307,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 | 309,0-315,0 | | | | | | | | |
| C-Nr. | 4 394 356 | | | | | | | | |
| 050 | 246,0 | 1070 | | | | 100 | 120 0 170 0 | 200 | |
| 900 | 240,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 700 | 267,0 | | | | | | | | |
| C-Nr. | 4 394 386 | | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | | 100 | 130,0-170,0 | 300 2 | 25,0 |
| C-Nr. | 4 394 390 | | | | | | | | |
| 900 | 259,0-267,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 19.0-29.0 |
| 700 | 238,0-246,0 | | | • | | | ,. | | 2,0 23,0 |
| C-Nr. | 4 394 428 | | | | | | | | |
| 000 | 188,0-196,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 25.0 |
| 300 | 180,0-187,0 | | | | | | • | | ,. |
| C-Nr. | 4 394 473 | | | | | | | | |
| 350 | 189,0-197,0 | 875 | | | | 100 | 130,0-170,0 | 325 3 | 0,0 |
| 750 | 185,0-193,0 | | | | | | - | | • |
| -Nr. | 4 394 501 | | | | | | | | |
| | 175,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 158,0 | | | | | | | | |
| -Nr. | 4 394 521 | | | | | | | | • |
| | 239,0-247,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| 00 | 229,0-235,0 | | | | | | | | |
| -Nr. | 4 394 527 | | | | | | | | |
| | 161,0 | 925 | | | | 100 | 130,0-170,0 3 | 300 1 | 9,0-25,0 |
| 00 | 151,0 | | | | | | | | |

| | ttings for FL | | | very characteristics (5e) | | | Low | idle speed 5) |
|--|---|--------------|------------------|--|------------------------------|--|---|---------------------|
| Fuli-load (Control-re Text oil te | | | high ide s | peed (5b) | Starting Idle switchin | • | | Control roa |
| rev/miń | cm²/1000 strokes | rev/min | _ | cm ³ /1000 stroes | 1 | cm ³ /1000 strokes | révit | travel |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 88 | 9 |
| AC-Nr. | 4 394 541 | 1 | • | | 1 | | ı | |
| 050 | 202,0-210,5 | 1060-1080 | | | 100 | 130.0-17 | 0.0.30 | 0 19,0-25, |
| | 4 394 550 | | | | ,,,, | , | ,,,,, | 0 15,0-25, |
| 000 | 230,5-239,5 | 1010-1030 | | | 100 | 130.0-170 |). N 30 | 0 19,0-25, |
| ic-Nr. | 4 394 561 | | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| 050 | 258,0 | 1060-1080 | | | 100 | 130.0-170 | 0.0 30 | 0 19,0-25, |
| 900 | 256,0 | | | | | | , , | , , |
| C-Nr. | 4 394 564 | | | | | | | |
| 050 900 | 244,0 234,0 | 1070 | | | 100 | 130,0-170 | ,0 30 | 0 19,0-25, |
| | 4 394 569 | | | | | | | |
| 000 | 203,0-211,5 | 1010-1030 | | | 100 | 130.0-170 | 0.0 30 | 0 19,0-25, |
| C-Nr. | 4 394 590 | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | ,,,,, | |
| 050 | 260,5-271,0 | 1060-1080 | | | 100 | 130,0-170 | .0 30 | 0. 19.0 -2 5 |
| eginn e "02 | ing of movemer | | ,45 bar | at 750 PRM a | | | | |
| C-Nr. | 4 394 593 | | | | | | | |
| 050 | 251,5-261,5 | 1060-1080 | | | 100 | 130,0-170 | ,0 30 | 19,0-25, |
| C-Nr. | 4 394 703 | | | | | | | |
| 050 | 260,5-271,0 | 1060-1080 | 900 700 | 267,0-278,0 | 100 | 130,0-170 | ,0 300 | 19,0-25, |
| btain | top part posit mean curve al essure, gap sh | oove. Beginn | in quanting of t | 267,0-278,0 tity at 1050 movement: 0,4 | PRM. 1 | Adjust stop ,45 bar at | part 750 P | position RM and 0,9 |
| | 4 394 705 4 394 706 | | | | | | | |
| | 258,0 ° | 1060-1080 | | | 100 | 130,0-170 | 300 | 19,0-25,0 |
| 900 | 256,0 | | • | | | | | ,. 20, |
| | 4 394 707 | | | | | | | |
| | 244,0 234,0 | 1070 | • | | 100 | 130,0-170 | ,0 300 | 19,0-25,0 |
| -Nr. | 4 394 718 | | | | | | | |
| | 198,0-213,0 | 965-975 | | | 100 | 130.0-170 | . 0 300 | 21,0-27,0 |
| | 196,0-210,0 | | | | | | ,0 000 | 2130-2730 |
| -Nr. | 4 394 719 | | • | | | | | |
| | 166,0-168,0 142,5-146,5 | 915 | | | 100 | 130,0-170 | 0 300 | 21,0-27,0 |
| | 4 394 733 | | : | | | | | |
| | 255,0-261,0 | 1020 | | | | | | |
| 00 : | 233,0-20110 | 1020 | | | 100 | 130.0-170. | .በ 3በበ | 19,0-25,0 |

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K17

| C. Settings for Fuel Injection Pump with Fitted Governor | | | | | | | | | | |
|--|---|----------------|---------------------------|-------------------------------|-------------------------|------------------|---------|------------------------|--|--|
| Control | I delivery rod stop emp. 40°C (104°F) (2) | Breakaway (26) | Fuel deli- high idle : | very characteristics (5e) | Starting idle awitching | huel delivery 6 | Low idl | e speed 5) Control rod | | |
| rev/min. | cm ³ /1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| AC-Nr. | . 4 394 740/741 | 3 | • | • | ; | | | i | | |
| 1020 915 | 213,0-226,0 208,0-218,0 | 1030-1040 | | | | | | | | |
| AC-Nr. | . 4 394 744 | | | | | | | | | |
| 1050 900 | 250,0 256,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, | | |
| AC-Nr. | 4 394 745 | | | | | | | | | |
| 950 750 | 208,0-214,0 196,0-202,0 | 990 | | | 100 | 130,0-170,0 | 300 2 | 21,0-27, | | |
| AC-Nr. | 4 394 746 | | | | | | | | | |
| 875 600 | 161,0-165,0 140,0-144,0 | 890 | | | 100 | 130,0-170,0 | 300 | 19,0-25, | | |
| AC-Nr. | 4 394 771 | | | • | | | | | | |
| 800 600 | 113,0-119,0 102,0-108,0 | 820 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | | |
| \C-Nr. | 4 394 773 | | | | | | | | | |
| 800 600 | 125,0-131,0 134,0-140,0 | 820 | | * | 100 | 130,0-170,0 | 300 1 | 9,0-25, | | |
| \C-Nr. | 4 394 775 | | | | | | | | | |
| 900 900 | 192,0-198,0 180,0-186,0 | 1045 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | | |
| C-Nr. | 4 394 777 | | | | | | | | | |
| 000 800 600 | 200,0-206,0 180,0-186,0 189,0-195,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | | |
| C-Nr. | 4 394 779 | | | | | | | \si' | | |
| 940 | 185,0-195,0 | 955-65 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | | |
| C-Nr. | 4 394 781 | | | | | | | | | |
| 025 900 700 | 230,0-236,0 207,0-213,0 209,0-215,0 | 1040 | ٠ | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | | |
| C-Nr. | 4 394 783 | | | | | | | | | |
| 000 800 | 227,0-233,0 197,0-203,0 | 1020 | | · | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | | |
| C-Nr. | 4 394 785 | | • | | | • | | | | |
| 000 700 | 235,0-241,0 263,0-269,0 | 1020 | | | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 | | |

| C. S | Settings f | or Fuel in | iection Pun | p with Fitt | ted Governor |
|------|------------|------------|-------------|-------------|--------------|
|------|------------|------------|-------------|-------------|--------------|

| Full-toad o | | Breakaway | ② | Fuel deli | rery characteristics (5 | Starting f | uel delivery 6 | Low idi | le speed 3 |
|-------------|-------------------------------|-----------------|----------|---------------|-------------------------------|------------|-------------------------------|---------|------------------|
| | mp. 40°C (104°F) (2 | intermediate to | •••• | Lungar mass r | (S) | awitchin | g point | | Control rod |
| rev/mn | cm ³ /1000 strokes | rev/min | Θ | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 |
| | | • | | • | • | • | | • | • |
| IC-Nr. | 4 394 787 | | | | | | | | |
| 1000 | 220,0-226,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 600 | 209,0-215,0 227,0-233,0 | | | | | | | | |
| 000 | 227,0-233,0 | | | | | | | | |
| NC-Nr. | 4 394 789 | | | | | | | | |
| 910 | 190,0 | 930 | | | | 100 | 130,0-170,0 | 300 | 25,0 |
| IC-Nr | 4 394 791 | | | | | | | | |
| - | | 020 | | | | 100 | 130,0-170,0 | 300 | 19 0-25 |
| 900 700 | 160,0-166,0 139,0-145,0 | 920 | | | ^ | 100 | 150,0-170,0 | 300 | 13,0-23 |
| | | | | | | | | | |
| C-Nr. | 4 394 793 | | | | | | | | |
| 600 | 124,0-130,0 | 620 | | | | 100 | 130,0-170,0 | 300 | 19,9-25 |
| C-Nr. | 4 394 795 | | | | | | | | |
| 700 | 127,0-133,0 | 720 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 600 | 124,0-130,0 | 720 | | | | | 100,5 170,0 | | .,,,, |
| | | | | | | | | | |
| | 4 394 797 | | | | | | | | |
| 800 600 | 139,0-145,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 000 | 124,0-130,0 | | | | | | | | |
| C-Nr. | 4 394 799 | | | | | | • | | |
| 925 | 157,0-163,0 | 945 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 | 145,0-151,0 | | | | | | | | |
| 600 | 134,0-140,0 | | | | | | | | |
| IC-Nr. | 4 394 801 | | | | | | | | |
| 000 | 180,0-186,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 800 700 | 154,0-160,0 | | | | | | • | | |
| /00 | 142,0-148,0 | | | | | | | | |
| C-Nr. | 4 394 803 | | | | | | | | |
| 050 | 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 161,0-175,0 | | | | | | | | |
| 800 | 147,0-153,0 | | | | | | | | |
| C-Nr. | 4 394 805 | | | | | | | | |
| 900 | 187,0-193,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| 700 | 162,0-168,0 | | | | | | | | |
| C-Nr. | 4 394 807 | | | | | | | | |
| 900 | | 920 | | | | 100 | 130,0-170,0 | . 3UU | 27 N <u>-</u> 22 |
| 700 700 | 200,0-206,0 184,0-190,0 | 320 | | | | 100 | 150,0-1/0,0 | 500 | £1,U-33 |
| | | | | | | | | | |
| | 4 394 809 | | | | | | | | |
| 900 | 203,0-209,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 209,0-215,0 | | | | | | | | |

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|) . | Setting | s for Fuel | Injection | Pump with | Fitted Governor | |
|------------|---------|------------|-----------|------------------|-----------------|--|
| | | , | | • | | |

| Full-load C | | Breakaway | a | Fuel deli | very characteristics (5e | Starting i | uel delivery 6 | Low idl | e speed 5 |
|---------------------------|---|------------------|----------|--------------|-------------------------------|------------|------------------|---------|-------------|
| Control-ro Test oil le | nd stop mp. 40°C (104°F) (2) | intermediate spe | ed _ | I MOTI COM S | 9 (B) | switchin | g point | | Control rod |
| เอก\นกบ | cm ³ /1000 strokes | rev/min | • | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | ww never |
| 1 | 2 | 3 | | 4 | 5 | 6 | 7 | 8 | 9 |
| | | • | | • | | • | | • | • |
| lC-Nr. | | | | | | 400 | 400 0 100 | | |
| 750 600 | 185,0-191,0 222,0-228,0 | 770 | | | | 100 | 130,0-170,(| 300 | 19,0-25 |
| C-Nr. | 4 394 813 | | | | | | | | |
| 800 600 | 210,0-218,0 223,0-229,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 815 | | | | | | | | |
| 1050 900 700 | 222,0-228,0 202,0-208,0 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 817 | • | • | | | | | | |
| 1000 800 600 | 240,0-246,0 224,0-230,0 237,0-243,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| lC-Nr. | 4 394 819 | | | | | | | | |
| 050 900 700 | 245,0-251,0 224,0-230,0 237,0-243,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 821 | | | | | | | | |
| 000 800 600 | 217,0-223,0 197,0-203,0 219,0-225,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 823 | | | | | | | | |
| 900 700 | 210,0-216,0 212,0-218,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 394 825 | | | | | | | | |
| | 269,0-275,0 281,0-287,0 293,0-299,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 827 | | | | | | | | |
| 050 900 700 | 234,0-240,0 246,0-252,0 268,0-274,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 829 | | | | | | | | |
| 050 900 700 | 262,0-268,0 279,0-285,0 289,0-295,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 831 | | | | | | | | |
| 050 900 700 | 241,0-247,0 265,0-271,0 268,0-274,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |

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| | | | • | | | | |
|----|----------|------------|----------|-------------|--------|-------|----------|
| C. | Settings | for Fuel b | njection | Pump | with F | itted | Governor |

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| nd delivery Frod stop I temp. 40°C (104°F) | Breakaway | U hah i | delivery characte | | ing fuel delivery ching point | 6 | Low id) | Control rod |
|--|--|---|---|--|---------------------------------------|--|---|--|
| • | \mathbf{y} | 49 revin | nin cm³/1000 s | trokes rev/i | min cm ³ /1000 str | okes | reiv/mun | travel mm |
| | 3 | 4 | 5 | 6 | 7 | | 8 | 9 |
| | · | • | · | • | • | | • | |
| | | | | | _ | | | |
| | | | | 10 | 0 130,0-1 | 170,0 | 300 1 | 9,0-25, |
| 4 394 835 | | | | | | | | , |
| | | | | 10 | 0 130,0-1 | 70,0 | 300 1 | 9,0-25,0 |
| 4 394 837 | | | | | | | | |
| | | | | 10 | 0 130,0-1 | 70,0 | 300 1 | 9,0-25,0 |
| 4 394 839 | | | | | | | | |
| | | | | 100 | 0 130,0-1 | 70,0 | 300 19 | 9,0-25,0 |
| 4 394 841 | | | | | | | | |
| 288,0-294,0 287,0-293,0 | 920 | | | 100 | 130,0-1 | 70,0 | 300 27 | 7,0-33,0 |
| 4 394 843 | | | | | | | | |
| 255,0-261,0 | 1020 | | | 100 | 130,0-1 | 70,0 | 300 19 | ,0-25,0 |
| 272,0-278,0 | | | | | | | | |
| 4 394 845 | | | | | | | | |
| 239,0-245,0 233,0-239,0 | 1070 | | | 100 | 130,0-1 | 70,0 | 300 19 | ,0-25,0 |
| | | | | | | | | |
| | | | | | | | | |
| 197,0-203,0 220,0-226,0 | 1020 | | | 100 | 130,0-17 | 70,0 3 | 19 | ,0-25,0 |
| 4 394 849 | | | | | | | | |
| 222,0-228,0 254,0-260,0 | 920 | | | 100 | 130,0-17 | 70,0 3 | 00 19 | ,0-25,0 |
| 4 394 851 | | | | | | | | |
| 257,0-263,0 272,0-278,0 | 1070 | | | 100 | 130,0-17 | 0,0 3 | 00 27 | ,0-33,0 |
| 4 394 853 | | | | | | | | |
| 295,0-303,0 309,0-315,0 | 1075 | | | 100 | 130,0-17 | 0,03 | 00 25, | .0 |
| 4 394 857 | | | | | | | | |
| 262,0-268,0 | 1070 | | | 100 | 130 0-17 | n n ə | 00 10 | 0 05 0 |
| | 1-100 stockers (104°F) | cm ² /1000 strokes rev/min 3 | A 394 833 232,0-238,0 253,0-259,0 4 394 835 244,0-250,0 253,0-259,0 4 394 837 239,0-245,0 230,0-236,0 4 394 841 288,0-294,0 230,0-236,0 4 394 843 255,0-261,0 272,0-278,0 270,0-276,0 4 394 845 239,0-245,0 233,0-239,0 273,0-279,0 4 394 847 215,0-21,0 1020 273,0-279,0 4 394 849 222,0-228,0 223,0-260,0 4 394 849 222,0-228,0 223,0-260,0 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 849 4 394 853 4 394 853 4 394 853 4 394 853 295,0-303,0 309,0-315,0 4 394 857 | 1-10 d DPC (104°F) 2 2 2 2 2 2 2 2 2 | 14 15 15 15 15 15 15 15 | A 394 833 232,0-238,0 920 100 130,0-1 253,0-259,0 1020 100 130,0-1 288,0-254,0 920 100 130,0-1 288,0-254,0 920 100 130,0-1 288,0-254,0 920 100 130,0-1 288,0-254,0 920 100 130,0-1 303,0-1 303,0-236,0 4 394 843 255,0-261,0 1020 1020 100 130,0-1 303,0-1 303,0-236,0 4 394 845 239,0-245,0 1020 1020 100 130,0-1 303,0-1 303,0-236,0 303,0-315,0 303,0-3 | 150 d 100 130,0-170,0 100 130,0-170,0 | 100 130,0-170,0 300 130, |

K21

-18-

| Full-load Control-re Test oil te | | Breakaway (a | Fuel delin | rery characteristics (3e speed (3e) | Starting Idle switchin | fuel delivery 6 | Low idl | e speed 5 |
|--|---|--------------|-------------------|---|------------------------------|------------------------------------|---------------|------------------|
| rev/min | cm ³ /1000 strokes | | rev/min | cm ³ /1000 strokes 5 | | cm ³ /1000 strokes 7 | reiv/min 8 | travel mm |
| | | | 1 | | , | | | |
| | 4 394 861 | 4.070 | | | 100 | 120 0-170 0 | 200 1 | 0 0-25 |
| 050 900 700 | 296,0-302,0 301,0-307,0 309,0-315,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 863 | | | | | | | |
| 050 900 700 | 253,0-256,0 252,0-258,0 269,0-275,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 865 | | | | | | | |
| 050 900 700 | 208,0-214,0 230,0-236,0 260,0-266,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| C-Nr. | 4 394 867 | | | | | | | |
| 900 700 | 181,0-187,0 172,0-178,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| C-Nr. | 4 394 869 | | | | | | | |
| 925 800 700 | 176,0-182,0 162,0-168,0 177,0-183,0 | 945 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| C-Nr. | 4 394 871 | | | | | | | |
| 900 800 | 173,0-179,0 160,0-166,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| | 4 394 873 | | | | | | | |
| | 237,0-243,0 251,0-257,0 269,0-275,0 | 945 | | | 100 | 130,0-170,0 | 300 2 | :/ , U-33 |
| C-Nr. | 4 394 875 | | | | | | | |
| 700 500 | 218,0-224,0 240,0-246,0 | 720 . | | | 100 | 130,0-170,0 | 300 2 | 7,0-33 |
| C-Nr. | 4 394 877 | | | | | | | |
| | 213,0-219,0 212,0-218,0 240,0-246,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| C-Nr. | 4 394 879 | | | | | | | |
| 050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | 100 | 130,0-170,0 | 19,0- | 25,0 |

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

Testoil

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) | | | Fuel deli high ide | very characteristics (56) speed (56) | Starting idle switching | | Low idl | e speed 5 |
|---|------------------|---------|-----------------------|---|-------------------------------|-------------------------------|---------|--------------|
| rev/miń | cm³/1000 strokes | rev/min | . I | cm ³ /1000 strokes | | cm ³ /1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | <u> </u> | 5 | 6 | 7 | 8 | 9 |
| lC-Nr. | 4 394 881 | | | | | | | |
| • | 7 037 001 | | | | | | | |
| 700 600 | 246,0 263,0 | 720 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25 |

100 130,0-170,0 300 27,0

130,0-170,0 300 25,0

100 130,0-170,0 300 19,0-29,0

100

-19-

| AC-Nr. | 4 | 394 | 895 |
|--------|---|------|-----|
| | • | 40 T | |

258,0

167,0-175,0

259,0-267,0

238,0-246,0

620

925

AC-Nr. 4 394 891

AC-Nr. 4 394 893

600

600

900

700

| | 188,0-196,0 180,0-187,0 | 1025 | 100 | 130,0-170,0 | 300 | 25,0 |
|--|----------------------------|------|-----|-------------|-----|------|
|--|----------------------------|------|-----|-------------|-----|------|

AC-Nr. 4 394 897

| | 189,0-197,0 | 875 | 100 | 130,0-170,0 325 30,0 |
|-----|-------------|-----|-----|----------------------|
| 750 | 185 0_103 0 | | | |

AC-Nr. 4 394 899

| 900 175,0 925 100 130,0-1 700 158,0 | 70,0 300 19,0-25,0 |
|-------------------------------------|--------------------|
|-------------------------------------|--------------------|

AC-Nr. 4 394 905

| | 239,0-247,0 | 1025 | 100 | 130,0-170,0 300 | 25,0 |
|--|-------------|------|-----|-----------------|------|
|--|-------------|------|-----|-----------------|------|

AC-Nr. 4 394 907

| | 161,0 151,0 | 925 | 100 | 130,0-170,0 300 19,0-25,0 |
|--|----------------|-----|-----|---------------------------|
|--|----------------|-----|-----|---------------------------|

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 909

| 1050 | 202,0-210,5 | 1060-1080 | 100 | 130,0-170,0 30 | 0 19,0-25,0 |
|------|-------------|-----------|-----|----------------|-------------|
|------|-------------|-----------|-----|----------------|-------------|

AC-Nr. 4 394 911

| 1000 | 230,5-239,5 | 1010-1030 | 100 |) | 130.0-170.0 | 300 | 19.0 | 1-25 (| n |
|------|-------------|-----------|-----|---|-------------|-----|------|--------|---|
|------|-------------|-----------|-----|---|-------------|-----|------|--------|---|

AC-Nr. 4 394 915

| 4.000 | 000 0 011 = | | | | |
|-------|-------------|-----------|-----|-----------------|-----------|
| 1000 | 203,0-211,5 | 1010-1030 | 100 | 130.0-170.0 300 | 19.0-25.0 |

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-roc Test oil terr | 1 step | intermediate appeal | high idle t | | Starting Idle switchir | , | Low idl | Control rod |
|--|-------------------------------|---------------------|-------------|-------------------------------|------------------------------|------------------|---------|--------------|
| rev/min | cm ³ /1000 strokes | rev/min 40 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

-20-

AC-Nr. 4 394 917

1050 260.5-271.0 1060-1080 100 130,0-170,0 300 19,0-25,0

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and

0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 919

1050 215,5-261,5 1060-1080 100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 921

1050 260,5-271,0 1060-1080 900 267,0-278,0 100 130,0-170,0 300 19,0-25,0

267,0-278,0 700

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above. Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 925

1050 244,0 1070

100 130,0-170,0 300 19,0-25,0

900 234,0

800

AC-Nr. 4 394 997

900 173,0-179,0 160,0-166,0 920

100 130,0-170,6 300 19,0-25,0

Test Specifications Fuel Injection Pumps 1 and Governors

WPP 001/4 ALO 16,0 f

PE 6 P 120 A 420 LS 245

ROV 300...1050 PA 239 KR

0 401 846 302

companyAllis-Chalmers

1 - 5 - 3 - 6 - 2 - 4 Values only apply to test nozzle-and-holder assembly 0 681 443 022 and fuel-injection test tubing 9 681 230 703.

All test specifications are valid for Bosch Fuel Injection Pump Test Benches and Testers

A. Fuel Injection Pump Settings

Port closing at prestroke

2.8 + 0.1

mm (from BDC)

| Rotational speed rev/min | Control rod travel mm | Fuel delivery cm ³ /100 strokes 3 | Difference cm³/ 100 strokes 4 | Control rod travel mm 2 | Fuel delivery cm ³ /100 strokes 3 | Spring pre-tensioning (torque-control valve) mm 6 |
|--------------------------|-----------------------------|--|--|----------------------------------|--|---|
| 1000 | 12 | 26,4 - 27,1 | | | 1,0 | |
| 600 | 6 12 | 8,6 - 9,8 26,3 - 28,1 | | | | |
| 200 | 15 6 | 33,8 - 36,2 4,2 - 5,2 | | | | |

Adjust the fuel delivery from each outlet according to the values in [

B. Governor Settings

| deflection | rev/min Control rod travel mm | Control rod (a) travel mm rev/min (2a) 3 | Intermediate Degree of deflection of control lever 4 | rated sp rev/min 5 | Control rod travel mm 4 | Lower rated Degree of deflection of control lever 7 | speed rev/min 8 | Control rod travel mm 3 | Sliding s rev/min 10 | mm |
|------------|--|--|---|--------------------------|-------------------------------|---|--------------------------|------------------------------------|----------------------------|----|
| 66° | | | | | | 10° | 250 350 450 550 | 6,4-8,0 3,0-5,2 1,3-2,8 0 | | |

Torque control travel a =

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load of Control-ro Test oil ter | d stop np. 40°C (104°F) 2 | intermediate speed | high idle s | peed (5b) | idle switchir | ng point | travel | Control Control rootravel |
|--|------------------------------|--------------------|-------------|-------------------------------|------------------|-------------------------------|---------|---------------------------|
| rev/min | crh³/1000 strokes | rev/min 4a) | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | · | | | | |

Checking values in brackets

* 1 mm less control rod travel than col. 2

| | ettings for Fu | | | | | | vernor | | 410 2004 |
|----------------|--------------------|--|--|--|--|-------------------------------------|--|---|--|
| Control | rod stop | i | | ontrol-red ato | ny (2) lorc (104°F) | Idle | _ | | dle speed 5 Control rod |
| rev/min | | rev/min | ⊕ " | v/min cm | ³/1000 strokes | rev/min | cm³/1000 strokes | rev/m | travel un mm |
| 1 | 2 | 3 | 11 | 2 | | 6 | 7 | 8 | 9 |
| | | • | • | • | | • | • | • | • |
| | | | | | | | | | |
|)25 | 91,0- 93,0 | 1040 | 70 | 0 9 | 9,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| -Nr. | 4 320 793 | | | | | | | | |
| 00 | 122,0-124,0 | 1020 | 70 | 0 12 | 6,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| -Nr. | 4 320 815 | | | | | | | | |
| | | 910-920 | 70 | 0 10 | 1.0-107.0 | 100 | 90.0-130.0 | 300 | 19.0-25.0 |
| | ,. | | | | | | 20,0 100,0 | | 13,6 23,0 |
| -Nr. | 4 320 816 | | | | | | | | |
| 00 | 97,0-103,0 | 910-920 | 80 | 0 98 | 3,0-104,0 | 100 | 90,0-130,0 | 300 | 19.0-25.0 |
| -Nr | A 320 817 | | | | | | | | |
| | | 1120 | 80 | O 1/19 | 0 0-15/ 0 | 100 | 00 0-120 0 | 275 | 0.0.10.0 |
| 00 | 100,0 140,0 | 1120 | | | | 100 | 30,0-130,0 | 3/3 | 9,0-19,0 |
| -Nr. | 4 320 829 | | | | | | | | |
| 00 | | 1120 | 80 | 0 149 | 9.0-154.0 | 100 | 90.0-130.0 | 375 | 9.0-19.0 |
| | | | | | | | ,. | | 3,0 (3,0 |
| -Nr. | 4 320 933 | | | | | | | | |
| 00 | 102,0-110,0 | 1040 | 80 | 0 107 | 7,0-116,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| -Nr | A 320 939 | | • | | | | | | |
| | | 1040 | 70 | 107 | 75 + 1 | 100 | 00 0-120 0 | 200 | 25.0 |
| | - | 1040 | , , | 107 | 50 <u>T</u> T | 100 | 30,0-130,0 | 300 | 25,0 |
| | | | | | | | | | |
| 00 | 78,0-86,0 | 1040 | 700 | 100 | 1,0-109,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| -Nr. | 4 320 941 | | | | | | | | |
| 25 | 91,0- 93,0 | 1040 | 700 | 99 | ,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| -Nr. | 4 320 942 | | | | | | | | |
| 00 | 122,0-124,0 | 1020 | 700 | 126 | ,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-25,0 |
| -Nr | 4 320 980 | | | | | | | | |
| | | 1120 | ຂຸດຕ | 1 | _ | 100 | 00 0-120 0 | 275 | 0 0 10 0 |
| | | 1120 | 000 | , | _ | 100 | 30,0-130,0 | 3/3 | 9,0-19,0 |
| | | | | | | | | | |
| 10 | 111,0-119,0 | 1020 | 800 | 112 | ,0-118,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| Nr. | 4 321 016 | | | | | | | | |
| 50 | 95,0-101,0 | 1020 | 750 | 95 | ,0-101,0 | 100 | 90,0-130,0 | 300 | 25,0 |
| Nr. | 4 321 064 | | | | | | | | |
| | 112,0 | 1030 | 800 | 112 | ,5 | 100 | 90,0-130.0 | 300 | 25,0 |
| | -NrNrNrNrNrNrNrNr. | Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) (2) Fev/min cm³/1000 strokes 2 C-Nr. 4 320 754 91,0- 93,0 C-Nr. 4 320 793 100 122,0-124,0 C-Nr. 4 320 815 100 100,0-106,0 C-Nr. 4 320 816 100 97,0-103,0 C-Nr. 4 320 829 139,0-143,0 C-Nr. 4 320 829 139,0-143,0 C-Nr. 4 320 933 102,0-110,0 C-Nr. 4 320 939 100 98,5 ± 3 C-Nr. 4 320 940 100 78,0- 86,0 C-Nr. 4 320 941 25 91,0- 93,0 C-Nr. 4 320 942 100 108,0-116,0 C-Nr. 4 320 980 100 108,0-116,0 C-Nr. 4 320 981 101 111,0-119,0 C-Nr. 4 320 981 101 111,0-119,0 C-Nr. 4 321 016 103 95,0-101,0 C-Nr. 4 321 016 105 95,0-101,0 C-Nr. 4 321 064 | Full-toad delivery Control rod stop Test oil temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°F) (2) intermedate specific virtual temp. 40°C (104°C) (102°C | Full-load delivery Control-rod stop (2) rest of temp. 40°C (104°F) (2) restment temp. 40°C (10 | Full-toad delivery Control-rod stop Test oil temp. 40°C (104°F) (2) stemmedate speed T | Full-load delivery Control rod slop | Full-foad delivery Control of APC (1047) (2) resemble aspeed (1047) (2) res | Part Control of Service | Test and delivery Compared Test and delivery Compared Co |

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| | 2 | |
|---|---|---|
| _ | • | _ |

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) (2) | | Breakaway 20 | | Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) | | Starting fuel delivery 6 Idle switching point | | Low idle speed 5 | |
|---|----------------------|-------------------|---|---|-------------------------------|---|-------------------------------|------------------|---------|
| • | mp. 40°C (104°F) (2) | intermediate spec | | rev/min | cm ³ /1000 strokes | | cm ³ /1000 strokes | rev/min | travel |
| rev/min | 2 | 3 |) | 1 | 2 | 6 | 7 | 8 | 9 |
| | | | | | | | | 1 | 1 |
| C-Nr. | 4 359 816 | | | | | | | | |
| 900 | 100,0-106,0 | 910-920 | | 700 600 | 101,0-107,0 111,0-117,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-Nr. | 4 359 826 | | | | | | | | |
| 900 | 97,0-103,0 | 910-920 | | 800 | 98,0-104,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| C-No | 4 359 828 | | | | | | | | |
| 100 | 139,0-143,0 | 1120 | | 800 | 149,0-154,0 | 100 | 90,0-130,0 | 375 | 9.0-19 |
| 100 | 133,0-143,0 | 1120 | | 600 | 153,0-161,0 | | ,. | ••• | ., |
| lC-Nr | 4 359 830 | | | | | | | | |
| 025 | 91,0- 93,0 | 1040 | | 700 | 99,0-103,0 | 100 | 90,0-130,0 | 300 | 19,0-25 |
| | | , , , | | | | | | | - |
| • | 4 359 832 | 4020 | | 700 | 126 0-120 0 | 100 | 90,0-130,0 | 200 | 10 0-25 |
| 000 | 122,0-124,0 | 1020 | | 700 | 126,0-130,0 | 100 | 90,0-130,0 | 300 | 19,0-2: |
| IC-Nr. | 4 392 693 | | | | | | | | |
| 050 | 205,0-215,0 | 1065-80 | | 900 | 167,0-177,0 | 100 | 130,0-170,0 | 300 | 19,0-2 |
| C-Nr. | 4 392 695 | | | | | • | | | |
| 900 | 149,0-155,0 | 920 | | - | - | - | - | 300 | 19,0-2 |
| (C-N> | 4 392 697 | | | | | | | | |
| | 185,0-191,0 | 770 | | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | • | 770 | | 000 | 222,0 220,0 | 100 | 130,0 170,0 | 500 | 13,0 2. |
| | 4 392 699 | | | | | | | | |
| 800 | 210,0-218,0 | 820 | | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 701 | | | | | | | | |
| 900 | 203,0-209,0 | 920 | | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 703 | | | | | | | | |
| 050 | 220,0-230,0 | 1060-70 | | 900 | 200,0-210,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | 700 | 205,0-215,0 | | | | |
| IC-Nr. | 4 392 707 | | | | | | | | |
| 050 | 243,0-253,0 | 1060-80 | | 900 | 222,0-232,0 | | 130,0-170,0 | 300 | 19,0-25 |
| | | | | 700 | 235,0-245,0 | | | | |
| C-Nr. | 4 392 709 | | | | | | | | |
| 000 | 217,0-223,0 | 1020 | | 800 | 197,0-203,0 | | 130,0-170,0 | 300 | 19,0-25 |
| - | | - | | 600 | 219,0-225,0 | | - | | - ' |
| C-Nr. | 4 392 711 | | | | | | | | |
| 600 | 231,0-237,0 | 620 | | _ | - | • | - | 300 | 19,0-25 |

| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) (2 | | | | Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) | | Starting fuel delivery 6 Idle switching point | | Low idle speed 5 Control rod | |
|--|------------------|---------|------------|---|-------------------------------|---|-------------------------------|-------------------------------|--------------|
| rev/min | cm³/1000 strokes | rev/min | (9) | rev/min | cm ³ /1000 strokes | กเลาเงอา | cm ³ /1000 strokes | rev/min | travel mm |
| 1 | 5 | 3 | | 1 | 2 | 6 | 7 | 8 | 9 |
| • | • | • | • | • | • | | | • | • |
| IC-Nr. | 4 392 715 | | | | | | | | |
| 050 | 187,0-193,0 | 1070 | | 900 700 | 174,0-180,0 175,0-181,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 392 717 | | | | | | | | |
| 050 | 224,0-230,0 | 1070 | 8 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 719 | | | | | | | | |
| 050 | 200,0-206,0 | 1070 | 9 | 900 | 190,0-196,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | • | 700 | 214,0-220,0 | | - | | |
| lc-Nr. | 4 392 721 | | | | | | | | |
| 050 | 242,0-248,0 | 1070 | | 900 | 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | 700 | 230,0-236,0 | | | | |
| IC-Nr. | 4 392 723 | | | | | | | | |
| 750 | 244,0-250,0 | 770 | • | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 725 | | | | | | | | |
| 800 | 239,0-245,0 | 820 | (| 600 | 248,0-254,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 392 727 | | | | | | | | |
| 900 | 232,0-238,0 | 920 | • | 700 | 253,0-259,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | | • | | | | - |
| C-Nr. | | 1020 | | 800 | 230,0-236,0 | 100 | 120 0-170 0 | 200 | 10 0-25 |
| 000 | 212,0-218,0 | 1020 | • | 500 | 230,9-230,0 | 100 | 130,0-170,0 | 300. | 19,0-25 |
| C-Nr. | 4 392 731 | | | | | | | | |
| 900 | 288,0-294,0 | 920 | | 700 | 287,0-293,0 | 100 | 130,0-170,0 | 300 | 27,0-33 |
| C-Nr. | 4 392 735 | | | | | | | | |
| 050 | 239,0-245,0 | 1070 | | 900 | 233,0-239,0 273,0-279,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | | | 700 | 2/3,0-2/3,0 | | | | |
| | 4 392 737 | | | ••• | 44-4-5 | 4 | 400 0 0 0 | | |
| 000 | 215,0-221,0 | 1020 | | 800 600 | 197,0-203,0 220,0-226,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | 4 000 700 | | | | | | | | |
| | 4 392 739 | 4050 | | 000 | 105 0 204 0 | 4.00 | 120 0 470 0 | 200 | 40 0 0" |
| 050 | 207,0-213,0 | 1050 | | 900 700 | 195,0-201,0 225,0-231,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C_ Al∽ | 4 392 741 | | | | - | | | | |
| 050 | 213,0-219,0 | 1070 | | 900 | 202,0-208,0 | 100 | 130,0-170,0 | _ | - |
| JJU | L10,0 L10,0 | .570 | | 700 | 230,0-236,0 | | ,,0 | | |
| C-Nr. | 4 392 743 | | | | | | | | |
| 050 | 220,0-226,0 | 1070 | 9 | 900 | 210,0-216,0 | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | | | | 700 | 243,0-249,0 | | | | J |

| C. Settings for Fuel Injection Pump with Fitted Governor |
|--|
|--|

| Full-load Control-r | delivery | Breakaway (| Euli-load of Control-ro | | Starting | fuel delivery 6 | Low idl | e speed 5 |
|------------------------|-------------------------------|--------------------|-------------------------|------------------------------------|--------------|------------------------------------|--------------|--------------------|
| Test oil 4 | mp. 40°C (104°F) (2) | intermediate speed | Test oil ter | mp. 40°C (104°F) | awitchin | | | Control rod |
| rev/min | cm ³ /1000 strokes | rev/min (| rev/min | cm ³ /1000 strokes 2 | rev/min 6 | cm ³ /1000 strokes 7 | rev/min 8 | mm 9 |
| | | | | 1 | | | | 1 |
| AC-Nr. | 4 392 747 | | | | | | | |
| 1050 | 227,0-233,0 | 1070 | 900 | 208,0-214,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| į | | | 700 | 247,0-253,0 | | | | |
| AC-Nr. | 4 392 749 | | | | 4.00 | 400 0 470 0 | | |
| 1050 | 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 392 750 | | | | | | | |
| 1050 | 230,0-234,0 | 1070 | - | • | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 392 768 | | | | | | | |
| 800 | 123,0-133,0 | 820 | 600 | 132,0-142,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 392 775/776 | | | | | | | |
| 875 | 162,0-164,0 | 890 | 600 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 392 777 | | | | | | | |
| 950 | 205,0-207,0 | 970 | 700 | 195,0-199,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr. | 4 392 778 | | | | | | | |
| 950 | 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 | 21,0-27,0 |
| AC-Nr. | 3 392 779 | | • | | | | | |
| 1025 | 190,0-200,0 | 1030-40 | 1000 | 191,0-201,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | 900 | 178,0-188,0 | | | | |
| AC-Nr. | 4 392 781 | | | | | | | |
| 1025 | 228,0-238,0 | 1050-60 | 900 700 | 205,0-215,0 207,0-217,0 | | 130,0-170,0 | 300 | 19,0-25,0 |
| A O Also | 4 202 0E2 | | | , , | | | | |
| AC-Nr. 940 | 4 392 953 185,0-195,0 | 955-65 | •• | - | 100 | 130,0-170,0 | 300 | 19.0-25.0 |
| | | 333 03 | | | | ,. | | .5,0 20,0 |
| | 4 393 095 | 1060-80 | 900 | 210,0-220,0 | 100 | 130,0-170,0 | 300 | 10 N <u>-</u> 25 N |
| 1050 | 211,0-221,0 | 1000-80 | 700 | 238,0-248,0 | 100 | 13050-17050 | 300 | 13,0-23,0 |
| AC-Nr. | 4 393 307 | | | • | | | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 | 27,0-33,0 |
| AC-Nr. | 4 393 431 | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | 900 | 230,0-235,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | 700 | 260,0-266,0 | | | | |
| AC-Nr. | 4 393 821 | | | | | | | |
| 1050 | 242,0-248,0 | 1070 | 900 700 | 220,0-226,0 230,0-236,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | | | , 50 | 200,0-200,0 | | | | |

| | | | ** ** *** | | |
|---|-----------|-------------|--------------|------------------------|--|
| | 0-44! | 4 P 1 1-1 | laskian Muma | with the American | |
| | Settings | tor Fuel in | ection Pump | i with Pitten Governor | |
| • | A0.001120 | | | with Fitted Governor | |

| delivery od stop emp. 40°C (104°F) | ` | Contr | outs bor-to | idle | | Low idi | e speed 5 |
|--|---|---|----------------------------|--|-------------|--|--|
| cm³/1000 strokes | 1 . | ~ I . | | 1 | | rev/min | travel mm |
| 3 | 3 | 1- | 2 | 6 | 7 | 8 | • |
| • | • | • | • | • | • | • | • |
| 4 393 823 | | | | | | | |
| 187,0-193,0 | 1070 | 900 70 0 | | | 130,0-170,0 | 300 | 19,0-25 |
| 4 393 825 | | | | | | | |
| 224,0-230,0 | 1070 | 800 | 185,0-191,0 | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 4 393 827 | | | | | | | |
| 200,0-206,0 | 1070 | 900 700 | | | 130,0-170,0 | 300 | 19,0-25 |
| 4 393 829 | | | | | | | |
| 230,0-234,0 | 1070 | - | - | 100 | 130,0-170,0 | 300 | 19,0-25, |
| 4 393 831 | • | | • | | | | |
| 213,0-219,0 | 1070 | 900 700 | 202,0-208,0 230,0-236,0 | 100 | 130,0-170,0 | - | - |
| 4 393 833 | | | | | | | |
| | 1060-1080 | 900 | 280.5 | 100 | 130-0-170-0 | 300 - | 19.0-25. |
| | | | • | | ,. | | |
| • | 1070 | 000 | 210 0-216 0 | 400 | 120 0 170 0 | 200 | |
| 220,0-220,0 | 1070 | 700 | 243,0-249,0 | 100 | 130,0-170,0 | 300 | 19,0,25, |
| 4 393 837 | | | | | | ٠ | |
| 227,0-233,0 | 1070 | 900 700 | 208,0-214,0 247,0-253,0 | 100 | 130,0-170,0 | 300 [°] 1 | 9,0-25, |
| 4 393 890 | | | • | | | | |
| 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 21.0-27. |
| 4 393 891 | | | | | | | |
| | 965-975 | 895 | 203.0 | _ | • • | | _ |
| | | | ,. | | | | _ |
| | 020 | 700 | 470 0 470 0 | 400 | | | |
| 181,0-18/,0 | 920 | /00 | 1/2,0-1/8,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| 4 394 001 | | | | | | | |
| 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| 4 394 017 | | | | | | | |
| 208,0-214,0 | 990 | 750 | 196,0-202,0 | 100 | 130,0-170,0 | 300 2 | 1,0-27. |
| 4 394 020 | | | | | - | | |
| 249,0-257,0 | 725 | 600 | 258,0-264,0 | 100 | 130,0-170,0 | | |
| | 4 393 823 187,0-193,0 4 393 825 224,0-230,0 4 393 827 200,0-206,0 4 393 831 213,0-219,0 4 393 835 220,0-226,0 4 393 837 227,0-233,0 4 393 891 208,0 4 393 961 181,0-187,0 4 394 001 218,0-224,0 4 394 017 | cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 strokes cm ³ /1000 c | ### 40PC (104*F) 2 | ###################################### | A 393 823 | ### APPC (104F) 2 Intermediate speed Part of the first of teems APPC (104F) 2 Intermediate speed Part of the first of teems APPC (104F) 2 Intermediate speed Part of the first of teems APPC (104F) 2 Intermediate speed Part of the first of teems APPC (104F) 2 Intermediate speed Part of the first of teems APPC (104F) 2 Intermediate speed Part of the first of teems APPC (104F) 2 Intermediate speed Part of the first of the | A 393 823 1070 900 174,0-180,0 100 130,0-170,0 300 175,0-181,0 100 |

| Contro | ad delivery N-rod stop I temp. 40°C (104°F) (2) | Breakaway | | Full-load d Control-ro Test oil ter | | Idle | fuel delivery 6 | Low id | e speed 5 |
|--------|---|-----------|-------------|---|-------------------------------|---------|-------------------------------|---------|---|
| rev/mi | 1 | rev/min | (4) | ev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | travel mm |
| 1- | 2 | 3 | | | 2 | 6 | 7 | 8 | • |
| AC No | 4 204 062 | | | | | | | | |
| 800 | 4 394 062 113,0-119,0 | 820 | c | 00 | 102 0 100 0 | 400 | 400 0 470 0 | | |
| | | 620 | 0 | 00 | 102,0-108,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| | 4 394 064 | | | | | | | | |
| 875 | 161,0-165,0 | 890 | 6 | 00 | 140,0-144,0 | 100 | 130,0-170,0 | 300 | 19,0-25,0 |
| AC-Nr | . 4 394 066 | | | | | | | | |
| 800 | 125,0-131,0 | 820 | 6 | 00 | 134,0-140,0 | 100 | 130,0-170-0 | 300 | 19,0-25,0 |
| AC-Nr | . 4 394 068 | | | | | | | | |
| 1025 | 192,0-198,0 | 1045 | 90 | 00 | 180,0-186,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr | . 4 394 070 | | | | | | | | |
| 1000 | 200,0-206,0 | 1020 | 80 | | 180,0-186,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25.0 |
| | | | 60 | 10 | 189,0-195,0 | | | | -,,- |
| AC-Nr. | . 4 394 072 | | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | | | - | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 074 | | | | | | | | |
| 1025 | 230,0-236,0 | 1040 | 90 | | 207,0-213,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25.0 |
| | | | 70 | 10 | 209,0-215,0 | | | | -,,- |
| AC-Nr. | 4 394 076 | | | | | | | | |
| 1000 | 227,0-233,0 | 1020 | 80 | 0 | 197,0-203,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 078 | | | | | | • | • | |
| 1000 | 235,0-241,0 | 1020 | 70 | 0 : | 263,0-269,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25.0 |
| AC-Nr. | 4 394 080 | | | | | | · | | |
| 1000 | 220,0-226,0 | 1020 | 80 | 0 2 | 209,0-215,0 | 100 | 130,0-170,0 | 300 1 | 9 0 25 0 |
| | | | 60 | 0 2 | 27,0-233,0 | | .00,0 170,0 | 300 1 | 7,0,25,0 |
| AC-Nr. | 4 394 082 | | | | | | | | |
| 910 | 190,0 | 930 | - | | • | 100 | 130,0-170,0 | 300 2 | 5,0 |
| AC-Nr. | 4 394 084 | | | | | | | | |
| 900 | 160,0-166,0 | 920 | 700 |) 1 | 39,0-145,0 | 100 | 130,0-170,0 | 300 19 | 9-0-25-0 |
| AC-Nr. | 4 394 086 | | | | • | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| 600 | 124,0-130,0 | 620 | - | | - | 100 | 130 0-170 0 4 | 200 47 |) 0 05 0 |
| | 4 394 088 | | | | | 100 | 130,0-170,0 | 300 IS | 7,U-25,U |
| 700 | 127,0-133,0 | 720 | £ 00 | ٠ 4 | 24 0 420 0 | 100 | 400 0 450 0 | | |
| | | 120 | 600 | , 1 | 24,0-130,0 | 100 | 130,0-170,0 3 | 300 19 | ,0-25,0 |
| | 4 394 090 | 000 | | | | | | | |
| 800 | 139,0-145,0 | 820 | 600 | 1 | 24,0-130,0 | 100 | 130,0-170,0 3 | 300 19 | ,0-25,0 |

| | Settings fo | - Eucl | Injection | Dump with | Eittad | GOVERNOR |
|----|-------------|--------|-----------|--------------|--------|-----------|
| V. | cerniae ic | 11001 | | a comb agent | | 401011101 |

| Control | d delivery rod stop temp. 40°C (104°F) (2 | Breakaway intermediate spe | Control | delivery 2 rod stop emp. 40°C (104°F) | idle | fuel delivery 6 | Low id) | e speed 5 |
|----------|---|-------------------------------|------------|---|------|------------------|---------------------|--------------|
| rev/min | 1 | rev/min | rev/min | cm ³ /1000 strokes | ı | cm³/1000 strokes | revimin | travel mm |
| | 2 | [3 | | | 6 | 7 | 8 | 9 |
| AC-Nr. | 4 394 092 | | | | | | | |
| 925 | 157,0-163,0 | 945 | 800 | 145,0-151,0 | 100 | 130,0-170,0 | 300 1 | 0 0-25 |
| | .07,0 | | 600 | 134,0-140,0 | .00 | 100,0 170,0 | 300 1 | 3,0-23 |
| C-Nr. | 4 394 094 | | | | | | | |
| 000 | 180,0-186,0 | 1020 | 800 | 154,0-160,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| | | | 700 | 142,0-148,0 | | • | | • |
| C-Nr. | 4 394 096 | | | | | | | |
| 050 | 207,0-213,0 | 1070 | 900 | 161,0-175,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25 |
| | | | 800 | 147,0-153,0 | | | | |
| | 4 394 098 | | | | | | | |
| 900 | 187,0-193,0 | 920 | 700 | 162,0-168,0 | 100 | 130,0-170,0 | 300 2 | 7,0-33, |
| C-Nr. | 4 394 100 | | | | | | | |
| 900 | 200,0-206,0 | 920 | 700 | 184,0-190,0 | 160 | 130,0-170,0 | 300 2 | 7,0-33, |
| C-Nr. | 4 394 102 | | | | | | | |
| 900 | 203,0-209,0 | 920 | 700 | 209,0-215,0 | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| C-Nr. | 4 394 104 | | | | | | | |
| 750 | 185,0-191,0 | 770 | 600 | 222,0-228,0 | 100 | 130,0-170,0 | 300 1 | 9.0-25. |
| C-Nr | 4 394 106 | | | | | , | | -,0 -0, |
| 800 | 210,0-218,0 | 820 | 600 | 223,0-229,0 | 100 | 130,0-170,0 | 300 1: | Q N_25 |
| | | | | | 100 | 100,0 170,0 | J00 _. 1. | J,U-2J, |
| 050 | 4 394 108 222,0-228,0 | 1070 | 900 | 202,0-208,0 | 100 | 120 0-170 0 | 200 1 | 0 0 05 |
| 000 | 222,0 220,0 | 1070 | 700 | 207,0-213,0 | 100 | 130,0-170,0 | 200 1 | 9,0-25, |
| C-Nr. | 4 394 110 | | | | | | | |
| 000 | 240,0-246,0 | 1020 | 800 | 224,0-230,0 | 100 | 130,0-170,0 | 300 1 | 9-0-25. |
| | | | 600 | 237,0-243,0 | | | | ,,, c, |
| C-Nr. | 4 394 112 | | | | | | | |
| 050 | 245,0-251,0 | 1070 | 900 | 224,0-230,0 | 100 | 130,0-170,0 | 300 19 | 9,0-25, |
| | | • | 700 | 237,0-243,0 | | | | |
| C-Nr. | 4 394 114 | | | | | | | |
| 000 | 217,0-223,0 | 1020 | 800 600 | 197,0-203,0 219,0-225,0 | 100 | 130,0-170,0 | 300 19 | 9,0-25, |
| . | | | 000 | L17,U-220,U | | | | |
| | 4 394 116 | 000 | 700 | 040 6 040 0 | 4.05 | 100 0 155 - | | |
| 900 | 210,0-216,0 | 920 | 700 | 212,0-218,0 | 100 | 130,0-170,0 | 300 27 | 7,0-33, |
| | 4 394 118 | | | | | | | |
|)50 | 269,0-275,0 | 1070 | 900 700 | 281,0-287,0 293,0-299,0 | 100 | 130,0-170,0 3 | 300 19 | 0.0-25.0 |

| C. Settings 1 | for Fuel | Injecti | ion Pump ' | with Fitted | Governor |
|---------------|----------|---------|------------|-------------|----------|
| | | | | | |

| Full-load (Control-ro | telivery od stop mp. 40°C (104°F) (2 | Breakaway | £ (8) | Full-load of Control-ro Test oil te | | 2 | Starting i Idle switchin | uel delivery g point | ③ | rom Jqj | e speed 3 Control ro |
|-----------------------|--|-----------|-------|---|----------------------|------------|--------------------------------|----------------------------|-------------|---------|-------------------------|
| Leat on re | cm ³ /1000 strokes | rev/min | • | rev/min | cm³/1000 stroi | | rev/min | cm ³ /1000 stro | kes | rev/min | travel mm |
| 1 | 2 | 3 | | 7 | 2 | | 6 | 7 | | 8 | 9 |
| . | 4 004 400 | • | • | • | • | | • | | | | |
| | 4 394 120 | 4000 | | 000 | 046 0 05 | ^ ^ | 400 | 420 0 4 | 70 0 | 200 | 40 0 00 |
| 050 | 234,0-240,0 | 1070 | | 900 700 | 246,0-25 268,0-27 | - | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| | | | | , 00 | 200,0 27 | .,. | | | | | |
| IC-Nr. | 4 394 122 | | | | | | | | | | |
| 050 | 262,0-268,0 | 1070 | | 900 | 279,0-28 | - | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| | | | | 700 | 289,0-29 | 5,0 | | | | | |
| C-Nr. | 4 394 124 | | | | | | | | | | |
| 050 | 241,0-247,0 | 1070 | | 900 | 265,0-27 | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| | | | | 700 | 268,0-27 | 4,0 | | | | | |
| C-Nr. | 4 394 126 | | | | | | | | | | |
| 900 | 232,0-238,0 | 920 | | 700 | 253,0-25 | 9,0 | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| | • | | | | • | | | | | • | |
| | 4 394 128 | | | | | | | | 70 0 | | |
| 750 | 244,0-250,0 | 770 | | 700 | 253,0-25 | 9,0 | 100 | 130,0-1 | /0,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 130 | | | | | | | | | | |
| 800 | 239,0-245,0 | 820 | ĺ | 600 | 248,0-25 | 4,0 | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| | • | | | | | | | | | | |
| | 4 394 132 | 4000 | | 000 | 000 0 00 | <i>-</i> ^ | 400 | 120 0 1 | 70 0 | 200 | 40 0 25 |
| 000 | 212,0-218,0 | 1020 | • | 800 | 230,0-23 | 0,0 | 100 | 150,0-1 | 70,0 | 200 | 19,0-25 |
| C-Nr. | 4 394 134 | | | | | | | | | | |
| 900 | 288,0-294,0 | 920 | | 700 | 287,0-29 | 3,0 | 100 | 130,0-1 | 70,0 | 300 | 27,0-33 |
| O N | 4 204 126 | | | | | | | | | | |
| | 4 394 136 | 4000 | | 000 | 272,0-27 | 0 0 | 100 | 130,0-1 | 70 0 | 200 | 10 0 25 |
| 000 | 255,0-261,0 | 1020 | | 800 600 | 270,0-27 | | 100 | 130,0-1 | 70,0 | 200 | 13,0~20 |
| | | | | | | • | | | | | |
| | 4 394 138 | | | | | | | | | | |
| 050 | 239,0-245,0 | 1070 | | 900 700 | 233,0-23 273,0-27 | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| | | | | | 2,0,0 2, | J 9 J | | | | | |
| C-Nr. | 4 394 140 | | | | | | | | | | |
| 000 | 215,0-221,0 | 1020 | | 800 | 197,0-20 | | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| | | | | 600 | 220,0-22 | U,U | | | | | |
| C-Nr. | 4 394 142 | | | | | | | | | | |
| 900 | 222,0-228,0 | 920 | | 700 | 254,0-26 | 0,0 | 100 | 130,0-1 | 70,0 | 300 | 19,0-25 |
| C_N_ | 4 394 144 | | | | | | | | | | |
| | | 1070 | | 750 | 272,0-27 | g n | 100 | 130,0-1 | 70 O | 300 | 27 0-23 |
| 050 | 257,0-263,0 | 10/0 | | , 50 | 2/2,0-2/ | U,U | 100 | 100,0~ | ,,,, | 300 | £1,0-33 |
| C-Nr. | 4 394 148 | | | | | | | | | | |
| 050 | 295,0-303,0 | 1075 | ! | 900 | 309,0-31 | 5,0 | 100 | 130,0-1 | 70,0 | 300 | 25,0 |

| C. \$ | Settings | for l | Fuel | Injection | Pump | with | Fitted | Governor |
|--------------|----------|-------|------|------------------|------|------|---------------|----------|
|--------------|----------|-------|------|------------------|------|------|---------------|----------|

| Full-load of Control-ro Test oil ter | Selivery od stop mp. 40°C (104°F) 2 | Breakaway 20 | Control-ro | lelivery 2 d stop np. 40°C (104°F) | Starting idle switching | fuel delivery 6 | Low idl | e speed 5 Control rod |
|--|---|--------------|------------|--|-------------------------|-------------------------------|----------|--------------------------|
| (ev/min | cm³/1000 strokes | rev/min 4 | rev/min | cm ³ /1000 strokes | rev/min | cm ³ /1000 strokes | reiv/min | travel mm |
| 1 | 2 | 3 | 1 | 2 | 6 | 7 | 8 | • |
| • • • • | 1 004 450 | • | • | • | • | | • | , , |
| AC-Nr. | 4 394 150 | | | | | | | |
| 1050 | 268,0-274,0 | 1070 | 900 700 | 274,0-280,0 280,0-286,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 152 | | | | | | | |
| 1050 | 262,0-268,0 | 1070 | 900 700 | 267,0-273,0 267,0-273,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 154 | | | | | | | |
| 1050 | 279,0-285,0 | 1070 | 900 700 | 283,0-289,0 293,0-299,0 | | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 156 | | | | | | | |
| 1050 | 296,0-302,0 | 1070 | 900 700 | 301,0-307,0 309,0-315,0 | | 130,0-170,0 | 300 | 19,0-25, |
| 40- **r. | 4 394 158 4 394 157 | | | | | | | |
| 1050 | 253,0-256,0 | 1070 | 900 700 | 252,0-258,0 269,0-275,0 | | 130,0-170,0 | 300 | 19,0-25, |
| lC-Nr | 4 394 160 | | | | | | | |
| 1050 | 208,0-214,0 | 1070 | 900 700 | 230,0-235,0 260,0-266,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| IC-No | 4 394 162 | | | | | | | |
| 900 | 181,0-187,0 | 920 | 700 | 172,0-178,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 164 | | | | | | • | |
| 925 | 176,0-182,0 | 945 | 800 700 | 162,0-168,0 177,0-183,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 166 | | | | | | | |
| 900 | 173,0-179,0 | 920 | 800 | 160,0-166,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 168 | | | | | | | |
| 925 | 237,0-243,0 | 945 | 800 700 | 251,0-257,0 269,0-275,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| C-Nr. | 4 394 170 | | | | | | | |
| 700 | 218,0-224,0 | 720 | 600 | 240,0-246,0 | 100 | 130,0-170,0 | 300 | 27,0-33, |
| C-Nr. | 4 394 176 | | | | | | | |
| 050 | 213,0-219,0 | 1070 | 900 700 | 212,0-218,0 240,0-246,0 | 100 | 130,0-170,0 | 300 | 19,0-25, |

| Control-ro | | Breakaway (2 | b) Fuel deli high ide | very characteristics (5e) speed (5b) | Starting idle switching | | 100 101 | e speed 5 |
|------------|--|--------------|--------------------------|---|-------------------------|-------------------------------|-----------|-------------------------------|
| (ev/min | np. 40°C (104°F) (2) cm²/1000 strokes | rev/min | \ I | cm ² /1000 atrokes | | cm ³ /1000 strokes | rev/min | Control rod travei 1 mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| AC N | 4 394 246 | 5 | 1 | 1 | 1 | • | J | : |
| 1050 | 211,0-220,0 | 1055-1075 | 975 | 237,5-247,0 | 100 | 130,0-170,0 | 200 | 10 0-25 |
| | 211,0-220,0 | 1000-1070 | 700 600 | 258,5-269,5 255,5-266,0 | 5 | 130,0-170,0 | 300 | 13,0-23 |
| | top part posi stop part po | | | | | | | |
| AC-Nr. | 4 394 248 | | | | | | | |
| 700 600 | 246,0 263,0 | 720 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 250 | | | | | | | |
| 1050 | 244,5-254,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 257 | | | | | | | |
| 600 | 258,0 | , | | • | 100 | 130,0-170,0 | 300 | 27,0 |
| C-Nr. | 4 394 314 | | | | | | | |
| 1050 | 246,0 | 1070 | | • | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 900 700 | 240,0 267,0 | | | | | | | |
| C-N» | 4 394 331 | | | | | | | |
| 050 | 241,0-247,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 900 | 265,0-271,0 | 1070 | | | 100 | 100,0 170,0 | 300 | 19,0-25 |
| 700 | 268,0-274,0 | | | | | | | |
| | 4 394 332 | 4070 | | | 4.0.0 | 400 0 1-1 | | |
| 900 | 268,0-274,0 274,0-280,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 280,0-286,0 | | | | | | | |
| C-Nr. | 4 394 347 . | | | | | | | |
| | 269,0-275,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| | 281,0-287,0 293,0-299,0 | | | | | | | |
| C-Nr. | 4 394 348 | | | | | | | |
| 050 | 234,0-240,0 | 1070 | | | 100 | 130,0-170,0 | 300 | 19,0-25. |
| | 246,0-252,0 | | | | - | | - | , |

1050 900 700

1070

1070

208,0-214,0 230,0-236,0 260,0-266,0

AC-Nr. 4 394 350 1050

262,0-268,0 279,0-285,0 289,0-295,0 900 700

100 130,0-170,0 300 19,0-25,0

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100 130,0-170,0 300 19,0-25,0

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| C. Settings | for Fuel In | jection Pump | with Fitted | Governor |
|-------------|-------------|--------------|-------------|----------|
| | | | | |

-12-

| Control | d delivery -rod stop | Breakaway | | Fuel deli- | very characteristics (September 2007) | 'i idie | fuel delivery 6 | Low idl | e speed 5 |
|--------------------|--|-------------------|----------|------------|---------------------------------------|---------|-------------------------------|------------|-----------------------------|
| tex/Wiv | temp. 40°C (104°F) (2) cm³/1000 strokes | intermediate apec | 4 | rev/min | cm ³ /1000 strokes | rev/min | ng point crn³/1000 strokes | reiv/min l | Control rod travel mm |
| 1 | 2 | 3 | <u> </u> | 4 | 5 | 6 | 7 | 8 | 9 |
| AC No | 4 204 254 | | ı | | | | 1 | | |
| 1050 | . 4 394 351 253,0-256,0 | 1070 | | | | 100 | 120 0-170 0 | 200 | 10 0 05 |
| 900 700 | 252,0-258,0 269,0-275,0 | 1070 | | | | :00 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | . 4 394 352 | | | | | | | | |
| 1050 900 700 | 262,0-268,0 267,0-273,0 267,0-273,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. | . 4 394 353 | | | | | | | | |
| 1050 900 700 | 279,0-285,0 283,0-289,0 293,0-299,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. | 4 394 354 | | | | | | | | |
| 1050 900 700 | 296,0-302,0 301,0-307,0 309,0-315,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. | 4 394 356 | | | | | | | | |
| 1050 900 700 | 246,0 240,0 267,0 | 1070 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, |
| AC-Nr. | 4 394 386 | | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| AC-Nr. | 4 394 390 | | | | | | | , | |
| 900 700 | 259,0-267,0 238,0-246,0 | 925 | | | | 100 | 130,0-170,0 | 300 1 | 9,0-29,0 |
| | 4 394 428 | | | | | | | | |
| 000 800 | 188,0-196,0 180,0-187,0 | 1025 | | | | 100 | 130,0-170,0 | 300 2 | 5,0 |
| C-Nr. | 4 394 473 | | • | • | | | | | |
| 850 750 | 189,0-197,0 185,0-193,0 | 875 | | | | 100 | 130,0-170,0 | 325 30 |) , 0 |
| C-Nr. | 4 394 501 | | | | | | | | • |
| 900 700 | 175,0 158,0 | 925 | | | | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| C-Nr. | 4 394 521 | | | | | | | | • |
| | 239,0-247,0 229,0-235,0 | 1025 | | | | 100 | 130,0-170,0 3 | 100 25 | ,0 |
| C-Nr. | 4 394 527 | | | | | | | | |
| | 161,0 151,0 | 925 | | | | 100 | 130,0-170,0 3 | 00 19 | ,0-25,0 |

| | delivery rod stop | Breakaway | | uel deli igh ide : | rery characteristics (56 | Starting | fuel delivery (| ⊕¦જ | idle | speed 5 |
|----------------------------|---|-------------|------|-----------------------|-------------------------------|-------------|-------------------------------|--------|----------|-------------|
| | emp. 40°C (104°F) 2 | T. | | | (S) | | ng point i | | | Control roc |
| rev/min | cm ³ /1000 strokes | | (4) | ev/min | cm ³ /1000 strokes | 1 | cm ³ /1000 strokes | 1 | min | mm |
| 1 | 2 | 3 | | | 5 | 6 | 7 | - 8 | \dashv | 9 |
| AC-Nr | . 4 394 541 | | | | | | | | | |
| 1050 | 202,0-210,5 | 1060-108 | 30. | | | 100 | 130,0-170 | 0.0 3 | 00 1 | 9.0-25 |
| AC-Nr | . 4 394 550 | | | | | | | | | |
| 1000 | 230,5-239,5 | 1010-103 | en. | | | 100 | 120 0-170 | 1 0 20 | 30 4 | 0 0 25 |
| | • | 1010 103 | ,, | | | | 130,0-170 |),U 3(| ו טכ | 9,0-25 |
| | . 4 394 561 | | _ | | | | | | | |
| 1050 900 | 258,0 256,0 | 1060-108 | 10 | | | 100 | 130,0-170 | ,0 30 | 00 1 | 9,0-25 |
| | - | | | | | | | | | |
| | . 4 394 564 | 4070 | | | | 400 | 400 0 470 | | | |
| 1050 900 | 244,0 234,0 | 1070 | | | | 100 | 130,0-170 | ,0 30 | 00 1 | 9,0-25 |
| 1C-Nr | . 4 394 569 | | | | • | | | | | |
| 000 | 203,0-211,5 | 1010-103 | n | | | 100 | 130,0-170 | 0 20 | 10 1 | 0 0 25 |
| | | 1010 100 | Ū | | | 100 | 150,0-170 | ,6 30 | | 3,0-23 |
| | 4 394 590 | 4060 400 | | | | | | | | |
| 050 | 260,5-271,0 ning of movemen | 1060-108 | - | han | a+ 750 DDM a | 100 nd 0 | | | | - |
| oe "0 | 20". | 16. 0,40 - | 0,43 | Dai | at 750 FMT 6 | ilu U, | o bar pres | ssure: | , ya | ip Silou |
| C-Nr. | 4 394 593 | , | | | | | | | | |
| 050 | 251,5-261,5 | 1060-1080 | 0 | | | 100 | 130,0-170 | .0 30 | 0 1 | 9.0-25. |
| C-Nr. | 4 394 703 | | | | | | - | | | |
| 050 | 260,5-271,0 | 1060-1080 | 0 91 | 00 | 267,0-278,0 | 100 | 130.0-170 | U 30 | n 1- | 0 0-25 |
| | _ | | 70 | 00 | 267,0-278,0 | | | | | |
| btaiı | stop part posit n mean curve ab ressure, gap sh | ove. Begin | ning | of | movement: 0,4 | 10 - 0 | ,45 bar at | 750 I | PRM | and 0, |
| C-Nr. | 4 394 705 | | | | | | | | | |
| u | 4 394 706 | | • | | | | | | | |
| 050 900 | 258,0 256,0 | 1060-1080 |) | | | 100 | 130,0-170 | 300 | 19 | 9,0-25, |
| | | | | • | | | | | | |
| | 4 394 707 | 4070 | | _ | | . - | | | | |
| 050 900 | 244,0 234,0 | 1070 | | • | | 100 | 130,0-170 | ,0 300 | 19 | 9,0-25, |
| -Nn | | | | | | | | | | |
|)55 | 4 394 718 | 005 075 | | | | 400 | 400 0 400 | | | |
| | 198,0-213,0 196,0-210,0 | 965-975 | | | | 100 | 130,0-170, | .0 300 | 21 | ,0-27, |
| 300 | | | | | | | | | | |
| 300 | A 39A 710 | | | • | | | | | | |
| 300 :-Nr. | 4 394 719 | Q1 5 | | | | 100 | 120 A 430 | A 222 | ^ ^ | ^ |
| 300 | 4 394 719 166,0-168,0 142,5-146,5 | 915 | | | | 100 | 130,0-170, | 0 300 | 21 | ,0-27, |
| 300 :-Nr. 375 300 | 166,0-168,0 142,5-146,5 | 915 | | | | 100 | 130,0-170, | 0 300 | 21 | ,0-27, |
| 300 :-Nr. 375 300 | 166,0-168,0 | 915 | | | | 100 | 130,0-170, 130,0-170, | ٠, | | · |

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| C. Settings | for Fuel Injection | Pump with | Fitted Governor | |
|-------------|--------------------|------------------|-----------------|--|
| | | | | |

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| | delivery | Breakaway (2 | Fuel deli | very characteristics (5a) | | fuel delivery 6 | Low idl | e speed 5 |
|------------------------|---|--------------------|-----------|-------------------------------|----------|------------------|---------|--------------|
| Control- Test oil t | rod stop emp. 40°C (104°F) (2) | intermediate speed | _ | pood ® | switchir | ng point | | Control rod |
| rev/min. | cm ³ /1000 strokes | rev/min | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | rev/min | travel mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | • |
| AC-Nr. | . 4 394 740/741 | • | • | • | • | • | • | • |
| 1020 915 | 213,0-226,0 208,0-218,0 | 1030-1040 | | | | | | |
| AC-Nr. | . 4 394 744 | | | | | | | |
| 1050 900 | 250,0 256,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| AC-Nr. | 4 394 745 | | | | | | | |
| 950 750 | 208,0-214,0 196,0-202,0 | 990 | | | 100 | 130,0-170,0 | 300 | 21,0-27, |
| NC-Nr. | 4 394 746 | | | | | | | |
| 875 600 | 161,0-165,0 140,0-144,0 | 890 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 771 | | | · | | | | |
| 800 600 | 113,0-119,0 102,0-108,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 773 | | | | | | | |
| 800 600 | 125,0-131,0 134,0-140,0 | 820 | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 775 | | | | | | | |
| 025 900 | 192,0-198,0 180,0-186,0 | 1045 | | | 100 | 130,0-170,0 | 300 1 | 19,0-25, |
| C-Nr. | 4 394 777 | | | | | | | |
| 000 800 600 | 200,0-206,0 180,0-186,0 189,0-195,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 19,0-25, |
| C-Nr. | 4 394 779 | | | | | | | |
| 940 | 185,0-195,0 | 955-65 | • | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 781 | | | | | | | |
| 025 900 700 | 230,0-236,0 207,0-213,0 209,0-215,0 | 1040 | ٠ | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 783 | | | | | | | |
| 000 300 | 227,0-233,0 197,0-203,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| C-Nr. | 4 394 785 | | • | | | • | | |
| 000 700 | 235,0-241,0 263,0-269,0 | 1020 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |

| C. Settings for Fuel Injection | Pump with Fitted Governor |
|--------------------------------|---------------------------|
|--------------------------------|---------------------------|

| Control-re | Full-load delivery Control-rod sloo | | Breakaway 20 | | rery characteristics(| U lidie | | Low idle speed 5 | |
|-------------|-------------------------------------|--------------------|--------------|---------|-----------------------|---------|-------------|------------------|--------------|
| Test oil te | mp. 40°C (104°F) (2) | intermediate speed | | | | switch | ing point | | Control root |
| rev/min | cm ³ /1000 strokes | rev/min | (4) | rev/min | cm³/1000 strokes | rev/mir | | rev/min | 1 |
| 1 | 2 | 3 | | - | 5 | - 6 | 7 | 8 | 9 |
| C_N_ | 4 394 787 | • | | | | | | | |
| | | 4000 | | | | 100 | 130,0-170,0 | 300 | 10 0-25 |
| 0001 800 | 220,0-226,0 209,0-215,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 13,0-23 |
| 600 | 227,0-233,0 | | | | | | | | |
| C No | 4 394 789 | | | • | | | | | |
| - | | 930 | | | | 100 | 130,0-170,0 | 300 | 25.0 |
| 910 | 190,0 | 330 | | | | | 100,0 170,0 | | 20,0 |
| NC-Nr. | 4 394 791 | | | | | | | | |
| 900 | 160,0-166,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 139,0-145,0 | | | | | | | | |
| C-Nr. | 4 394 793 | | | | • | | | | |
| 600 | 124,0-130,0 | 6 2 § | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| | | QL.9 | | | | | | | • |
| AC-Nr. | 4 394 795 | | | | | | | | |
| 700 | 127,0-133,0 | 720 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 124,0-130,0 | | | | | | | | |
| C-Nr. | 4 394 797 | | | | | | | | |
| 800 | 139,0-145,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 600 | 124,0-130,0 | | | | | | | | |
| C-Nr. | 4 394 799 | | | | | | | | |
| 925 | 157,0-163,0 | 945 | | | | 100 | 130,0-170,0 | 300 | 19.0-29 |
| 800 | 145,0-151,0 | J43 | | | | | ,. | | ,. |
| 600 | 134,0-140,0 | | | | | | | | |
| IC-Nr. | 4 394 801 | | | | | | | | |
| 1000 | 180,0-186,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| | 154,0-160,0 | 1020 | | | | | | | |
| 700 | 142,0-148,0 | | | | | | | | |
| C-Nr. | 4 394 803 | | | | | | | | |
| 1050 | 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19.0-25 |
| 900 | 151,0-175,0 | | | | * | | | | • |
| 800 | 147,0-153,0 | | | | | | | | |
| C-Nr. | 4 394 805 | | | | | | | | |
| 900 | 187,0-193,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27.0-33 |
| 700 | 162,0-168,0 | J & V | | | | | | | ,_ |
| C 11 | • | | | | | | | | |
| | 4 394 807 | 80 A | | | | 400 | 120 0 470 0 | | 27 0 22 |
| 900 700 | 200,0-206,0 184,0-190,0 | 92 0 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| , 00 | 10 7 50-13050 | | | | | | | | |
| C-Nr. | 4 394 809 | | | | | | | | |
| 900 | 203,0-209,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| 700 | 209,0-215,0 | | | | | | | | |

| Full-load d | lelivery | Breakaway | (B) | Fuel delivery characteristics 50 Sta | | Starting i | uel delivery (6) | Low idle speed 5 | |
|---|---|--------------------|-----|--------------------------------------|-------------------------------|------------------|------------------|------------------|--------------|
| Control-rod stop Tast oil temp. 40°C (104°F) (2) | | intermediate speed | | high idle speed (5) | | idie switchin | g polat | Control | |
| rev/min | cm ³ /1000 strokes | rev/min | 49 | rev/min | cm ³ /1000 strokes | rev/min | cm³/1000 strokes | r e v/min | travel mm |
| 1 | 2 | 3 | | 4 | s | 6 | 7 | 8 | 9 |
| | | | | | | 1 1 | | | |
| C-Nr. | 4 394 811 | | | | | | | | |
| 750 600 | 185,0-191,0 222,0-228,0 | 770 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 813 | | | | | | | | |
| 800 600 | 210,0-218,0 223,0-229,0 | 820 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 815 | | | | | | | | |
| 1050 900 700 | 222,0-228,0 202,0-208,0 207,0-213,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 817 | • | | | | | | | |
| 1000 800 600 | 240,0-246,0 224,0-230,0 237,0-243,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| AC-Nr. | 4 394 819 | | | | | | | | |
| 900 700 | 245,0-251,0 224,0-230,0 237,0-243,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 821 | | | | | | | | |
| 000 800 600 | 217,0-223,0 197,0-203,0 219,0-225,0 | 1020 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| lC-lir. | 4 394 823 | | | | | | | | |
| 900 700 | 210,0-216,0 212,0-218,0 | 920 | | | | 100 | 130,0-170,0 | 300 | 27,0-33 |
| | 4 394 825 | | | | | | | | |
| 050 900 700 | 269,0-275,0 281,0-287,0 293,0-299,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| C-Nr. | 4 394 827 | • | | | • | | | | |
| 050 900 700 | 234,0-240,0 246,0-252,0 268,0-274,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25 |
| IC-Nr. | 4 394 829 | | | | | | | | |
| | 262,0-268,0 279,0-285,0 289,0-295,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |
| C-Nr. | 4 394 831 | | | | | | | | |
| | 241,0-247,0 265,0-271,0 268,0-274,0 | 1070 | | | | 100 | 130,0-170,0 | 300 | 19,0-25, |

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| C. | Settings | for Fuel In | jection | Pump with | Fitted Governor |
|----|----------|-------------|---------|------------------|-----------------|

-17-

| l Contro | Full-load delivery Control-rod stop | | Breakaway 20 | | Fuel delivery characteristics (5e) high ide speed (5b) | | Idie | _ |) Low idl | e speed 5 |
|--------------------|---|--------------|--------------|--------------|--|----|------|------------------------------------|---------------|-----------------------|
| 1 - | Test oil temp. 40°C (104°F) 2 rev/min cm²/1000 strokes | | •••• ••• | į į | | | | ng point | | Control rod travel |
| rev/min | 2 | rev/min 3 | • | rev/min 4 | cm ³ /1000 strok 5 | 45 | 6 | cm ³ /1000 strokes 7 | reiv/min 8 | mm 9 |
| | | | | | | | | | | |
| AC-Nr. | . 4 394 833 | | | | | | | | | |
| 900 700 | 232,0-238,0 253,0-259,0 | | | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 835 | | | | | | | | | • |
| 750 700 | 244,0-250,0 253,0-259,0 | | | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| AC-Nr. | 4 394 837 | | | | | | | | | |
| 800 600 | 239,0-245,0 248,0-254,0 | | | | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 839 | | | | | | | | | |
| 1000 800 | 212,0-218,0 230,0-236,0 | 1020 | | | .* | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 |
| | 4 394 841 | | | | | | | | | |
| 900 709 | 288,0-294,0 287,0-293,0 | 920 | | | | | 100 | 130,0-170,0 | 300 2 | 7,0-33,0 |
| | 4 394 843 | | | | | | | | | |
| 1000 800 600 | 255,0-261,0 272,0-278,0 270,0-276,0 | 1020 | | | | | 100 | 130,0-170,0 | 300 19 | 9,0-25,0 |
| AC-Nr. | 4 394 845 | | | | | | | | | |
| 1050 900 700 | 239,0-245,0 233,0-239,0 273,0-279,0 | 1070 | | | | | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| AC-Nr. | 4 394 847 | | | | | | | | | |
| 1000 800 600 | 215,0-221,0 197,0-203,0 220,0-226,0 | 1020 | | | | | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| AC-Nr. | 4 394 849 | | | | | | | | | |
| 900 700 | 222,0-228,0 254,0-260,0 | 920 | | | | | 100 | 130,0-170,0 | 300 19 | ,0-25,0 |
| AC-Nr. | 4 394 851 | | | | | | | | | |
| | 257,0-263,0 272,0-278,0 | 1070 | | | | • | 100 | 130,0-170,0 | 300 27 | ,0-33,0 |
| RC-Nr. | 4 394 853 | | | | | | | | | |
| | 295,0-303,0 309,0-315,0 | 1075 | | | | 1 | 100 | 130,0-170,0 | 300 25 | ,0 |
| IC-Nr. | 4 394 857 | | | | | | | | | |
| 900 | 262,0-268,0 267,0-273,0 267,0-273,0 | 1070 | | | | 1 | 00 | 130,0-170,0 | 300 19 | ,0-25,0 |

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C. Settings for Fuel Injection Pump with Fitted Governor

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| Full-load delivery Control-rod stop Test oil temp. 40°C (104°F) (2) | | Breakaway (| | high idle speed | | fuel delivery 6 | Low idle speed 5 | | |
|---|---|--------------|-------------------|---|--------------|------------------|------------------|-------------------|--|
| rev/min | cm³/1000 strokes | rev/min | rev/min | cm ³ /1 000 strokes | rev/min 6 | cm³/1000 strokes | reiv/min 8 | travel mm 9 | |
| | | - | 1 | | <u> </u> | | 1 | | |
| C-Nr. | 4 394 861 | | | | | | | | |
| 050 900 700 | 296,0-302,0 301,0-307,0 309,0-315,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9 ,0-25, | |
| C-Nr. | 4 394 863 | | | | | | | | |
| 050 900 700 | 253,0-256,0 252,0-258,0 269,0-275,0 | 1070 | | ত | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 865 | | | | | | | | |
| 050 900 700 | 208,0-214,0 230,0-236,0 260,0-266,0 | 1070 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 867 | | | | | | | | |
| 900 700 | 181,0-187,0 172,0-178,0 | 920 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 869 | | | | | | | | |
| 925 800 700 | 176,0-182,0 162,0-168,0 177,0-183,0 | 945 | | · | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 871 | | | | | | | | |
| 900 800 | 173,0-179,0 160,0-166,0 | 920 | | • | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 873 | | | | | | | | |
| | 237,0-243,0 251,0-257,0 269,0-275,0 | 945 | | | 100 | 130,0-170,0 | 300 2 | 7,0-33, | |
| C-Nr. | 4 394 875 | | | | | | | | |
| 700 600 | 218,0-224,0 240,0-246,0 | 720 . | | | 100 | 130,0-170,0 | 300 2 | 7,0-33, | |
| C-Nr. | 4 394 877 | | | | | | | | |
| | 213,0-219,0 212,0-218,0 240,0-246,0 | 1060-1080 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25, | |
| C-Nr. | 4 394 879 | | | | | ¢. | | | |
| 050 | 211,0-220,0 | 1055-1075 | 975 700 600 | 237,5-247,0 258,5-269,5 255,5-266,0 | 100 | 130,0-170,0 | 19,0- | 25,0 | |

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above.

| | Cattings | for Eucl Injection | Danman saidh Eildead | Conomor |
|----|----------|--------------------|----------------------|----------|
| V. | Sermide | ior ruei mjection | Pump with Fitted | Coastuol |

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| Full-load delivery Control-rod stop | | Breakaway 200 | Fuel delivery characteristics (5a) high idle speed (50) | | Starting | fuel delivery 6 | Low idle speed 5 | | |
|--|----------------------------------|--------------------|---|-------------------------------|-----------------|-------------------------------|------------------|-------------|--|
| Test oil temp. 45°C (104°F) (2) | | Intermediate speed | | | switching point | | | Control rod | |
| rev/min | cm ³ /1000 strokes | rev/min 49 | rev/min | cm ³ /1000 strokes | 1 | cm ³ /1000 strokes | rev/min | mm | |
| | 2 | 3 | • | 5 | 6 | | 8 | 9 | |
| | | | | | | | | | |
| AC-Nr. | 4 394 881 | | | | | | | | |
| 700 | 246,0 | 720 | | | 100 | 130,0-170,0 | 300 | 19.0-25.0 | |
| 600 | 263,0 | | | | | | | | |
| AC-Nr. | 4 394 883 | | | | | | | | |
| 1050 | 244,5-254,5 | 1060-1080 | | | 100 | 130,0-170,0 | 300 | 19,0-25,0 | |
| AC-Nr. | 4 394 885 | | | | | | | | |
| 600 | 258,0 | | | | 100 | 130,0-170,0 | 200 4 | 27.0 | |
| | - | | | | 100 | 130,0-170,0 | 300 / | 27,0 | |
| | 4 394 891 | | | | | | | | |
| 600 | 167,0-175,0 | 620 | | | 100 | 130,0-170,0 | 300 2 | 25,0 | |
| AC-Nr. | 4 394 893 | | | | | | | • | |
| 900 | 259,0-267,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 9,0-29,0 | |
| 700 | 238,0-246,0 | | | | | | | | |
| AC-Nr. | 4 394 895 | | | | | | | | |
| 1000 | 188,0-196,0 | 1025 | | | 100 | 130,0-170,0 | 300 2 | 25,0 | |
| 800 | 180,0-187,0 | | | | | | | | |
| AC-Nr. | 4 394 897 | | | | | | | | |
| 850 | 189,0-197,0 | 875 | | | 100 | 130,0-170,0 | 325 3 | 0,0 | |
| 750 | 185,0-193,0 | | | | | | | | |
| C-Nr. | 4 394 899 | | | | | * | | | |
| 900 | 175,0 | 925 | | ٠ | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| 700 | 158,0 | | | | | | | | |
| IC-Nr. | 4 394 905 | | | | | | | | |
| | 239,0-247,0 | 1025 | | | 100 | 130,0-170,0 | 300 2 | 5,0 | |
| 700 | 229,0-235,0 | | | | | | | | |
| C-Nr. | 4 394 907 | | | | | | | | |
| | 161,0 | 925 | | | 100 | 130,0-170,0 | 300 1 | 9,0-25,0 | |
| | 151,0 | . 0 40 0 45 | . . | -+ 750 DDM | | | | | |
| | ng of movement r pressure, ga | | | at 750 PRM al | ıu | | | | |
| C-Nr. | 4 394 909 | | | | | | | | |
| | 202,0-210,5 | 1060-1080 | | | 100 | 130,0-170,0 3 | 200 10 | 0 0-25 0 | |
| | , | | | | . 50 | 100,0-170,0 | ,00 13 | 7,0-43,0 | |
| | 1 394 911 | 4040 4000 | | | | | | | |
| 000 2 | 230,5-239,5 | 1010-1030 | | | 100 | 130,0-170,0 3 | 300 19 | ,0-25,0 | |
| C-Nr. 4 | 1 394 915 | | | | | | | | |
| 000 2 | 203,0-211,5 | 1010-1030 | | | 100 | 130,0-170,0 3 | 100 19 | 0.0-25.0 | |
| | | | | | | | | ,- | |

C. Settings for Fuel Injection Pump with Fitted Governor

| Full-load de Control-rod Test oil tem | stoo | Breakaway 20 intermediate speed | Fuel delin high idle s | very characteristics (5e) psed (5b) | Starting Idle switchin | | Low id) | e speed 5 Control rod |
|---|------------------|---------------------------------|---------------------------|--|------------------------------|-------------------------------|---------|--------------------------|
| rev/min | cm³/1000 strokes | rev/min 49 | rev/min | cm³/1000 strokes | rev/min | cm ³ /1000 strokes | rev/min | mm · |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

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AC-Nr. 4 394 917

1050 260,5-271,0 1060-1080

100 130,0-170,0 300 19,0-25,0

Beginning of movement: 0,40 - 0,45 bar at 750 PRM and

0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 919

1050 215,5-261,5

1060-1080

100 130,0-170,0 300 19,0-25,0

AC-Nr. 4 394 921

1050 260,5-271,0

1060-1080 900

267,0-278,0 1

100 130,0-170,0 300 19,0-25,0

700 267,0-278,0

Tilt stop part position to obtain quantity at 1050 PRM. Adjust stop part position to obtain mean curve above. Beginning of movement: 0,40 - 0,45 bar at 750 PRM and 0,90 bar pressure, gap should be "020".

AC-Nr. 4 394 925

1050 244,0

1070

100 130,0-170,0 300 19,0-25,0

900 234,0

AC-Nr. 4 394 997

900 173,0-179,0 800 160,0-166,0 920

100 130,0-170,0 300 19,0-25,0